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(54) EXERCISE GLOVE

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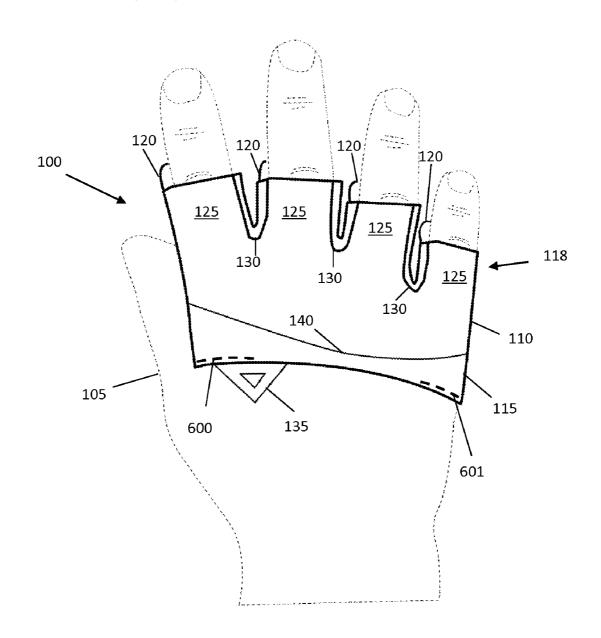
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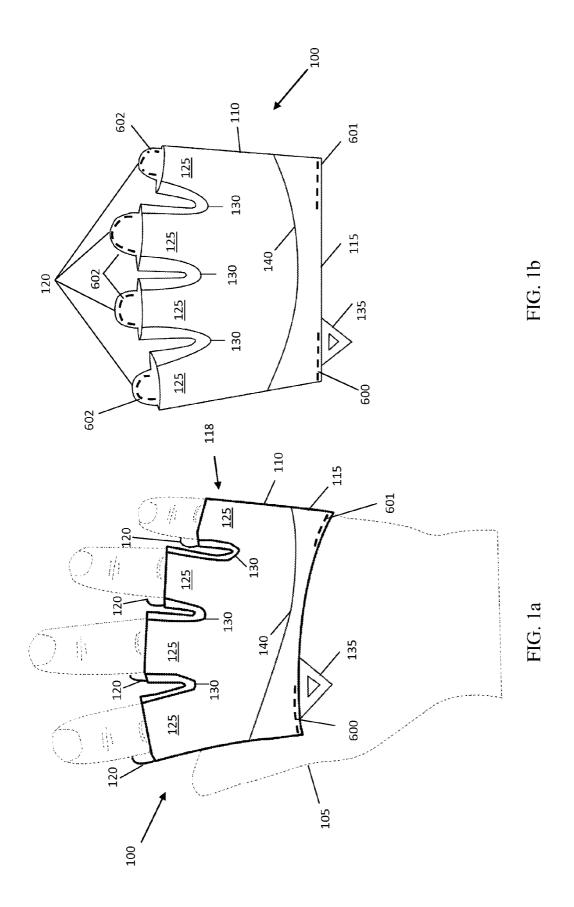
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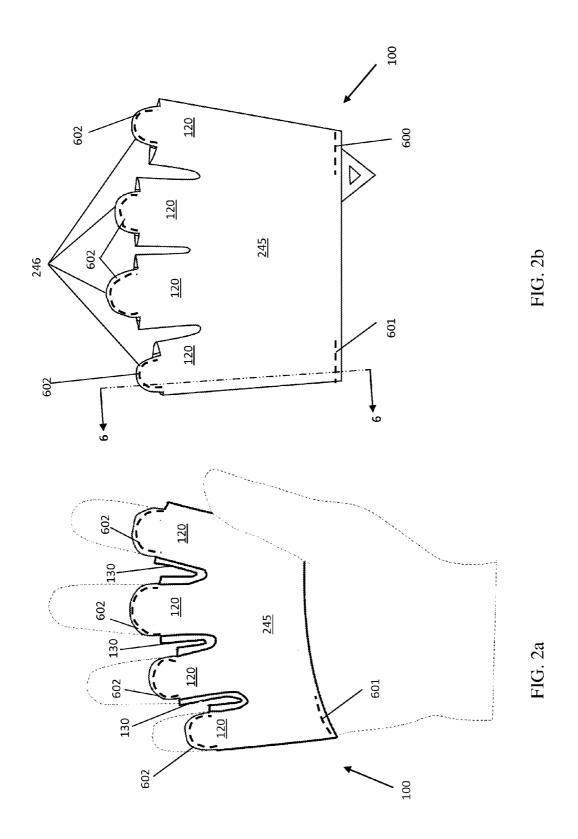
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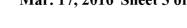
(57) ABSTRACT

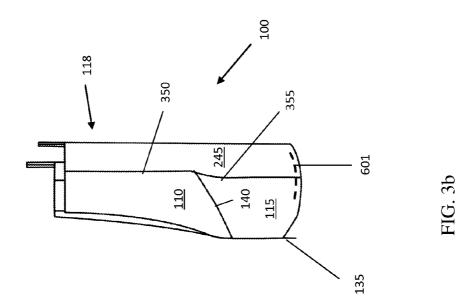
An exercise glove, comprising: a palm portion; a dorsal portion; a knuckles portion; and a fingers portion; wherein said palm portion comprises two layers configured to slide against one another with low friction, but engage with high friction the hand of a user and an item to be gripped. Additionally, the dorsal portion and the knuckles portion are connected at a first seam; wherein said first seam runs substantially along a back of a hand of a user; and caused the exercise glove to be secured to the hand.

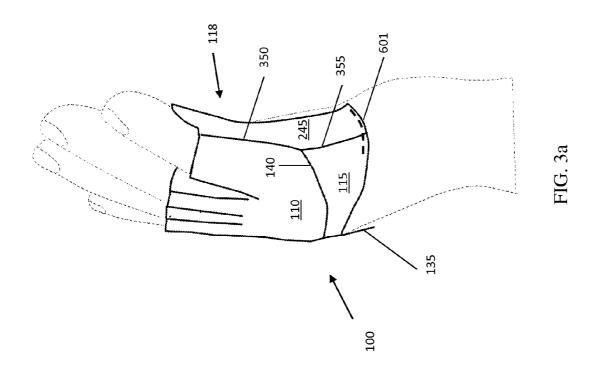


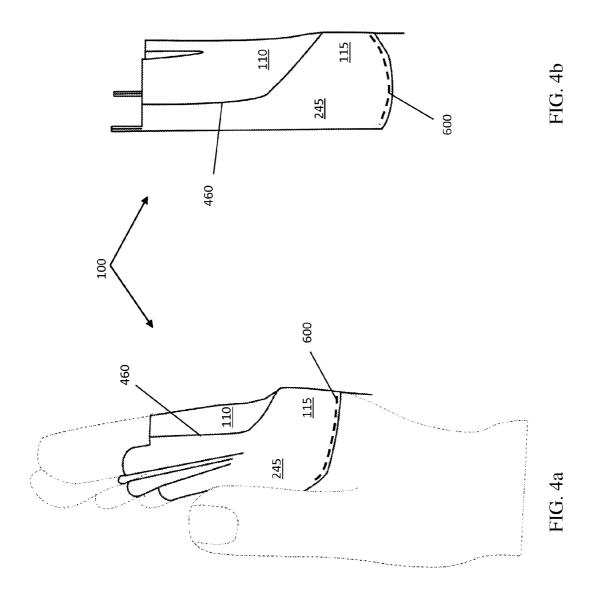


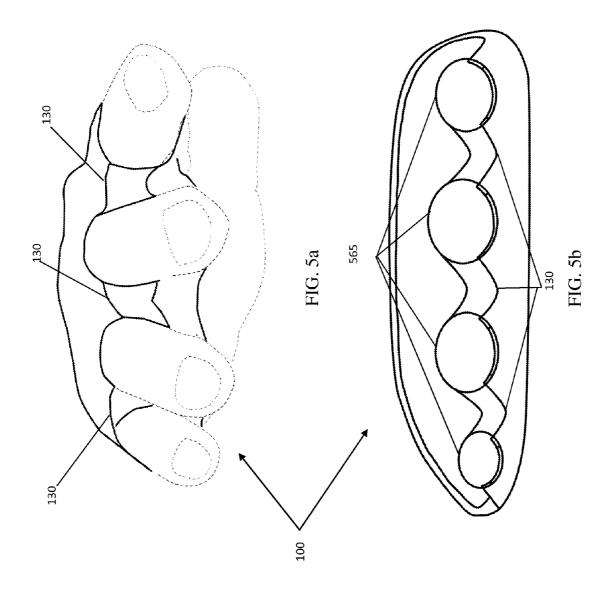


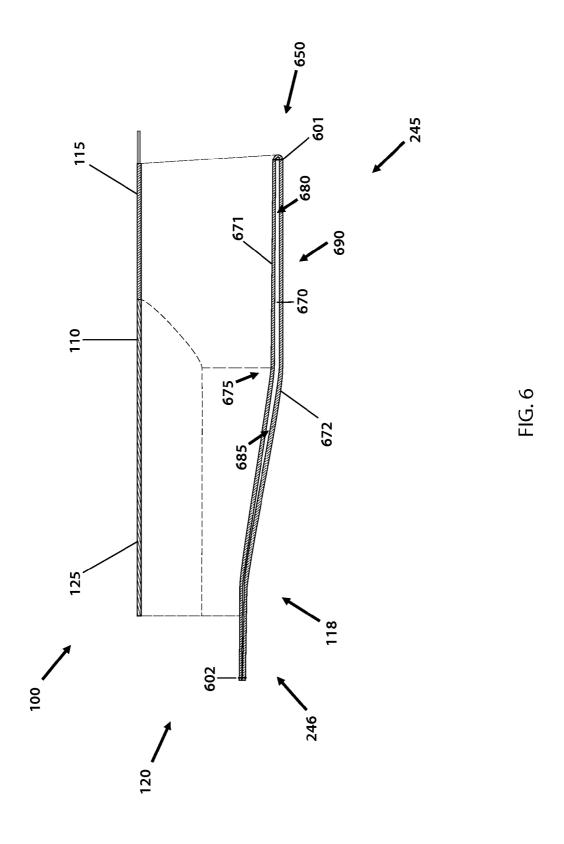












EXERCISE GLOVE

FIELD OF INVENTION

[0001] This invention relates generally to exercise gloves, and, in particular, to exercise gloves designed to prevent callous formation and enhance grip while preserving hands natural hand functionality of motor and sensory functioning.

BACKGROUND

[0002] In order to make gripping objects easier, humans invented handles. While the man-made handles allows for easier manipulation of objects, handles can create friction on a user's hand which tends to lead to callous formation. Friction may occur by back and forth movement of the handle on the skin while the bones of the hand are squeezing on the skin against the handle.

[0003] While callous formation by friction is common in many fields where handles are used, this callous formation is especially problematic in exercise and fitness. In exercise and fitness, handles tend to be made for durability, which can be harsh on the user's hands. Various types of handles are used in fitness but the most common handles are made out of metal because of metal's innate durability. While metal is durable, metal may be difficult to securely hold under sweaty conditions. Handles are often made of textured or patterned metal to avoid hand slipping which can lead to injury to the user or a person near the user. These handles tend to be harsh enough on the skin to create adequate friction to lead to callouses. Callouses tend to be aesthetically displeasing and may be felt during a handshake. Additionally, callouses sometimes decrease the efficiency to the user in their task.

[0004] With the growing popularity of strength training due to its cardiovascular and strength benefits, more people are getting into high-intensity strength training. With the increase of this type of training, callouses are becoming more common. These callouses are a huge problem in fitness, because callous formation increases the chances of pinching and tearing skin during the use of handles. The bigger the callous, the more likely that a large piece of skin may be ripped off the user's hand, which may lead to forcing the user to forego exercise while recovering from the ripped skin. This may lead to the user not being to reach their maximum potential.

[0005] To solve this problem, the most commonly used mechanism is using a glove that simply covers the entirety or just a part of the hands. Currently, there are various exercise or weight lifting gloves available on the market that attempt to reduce callous formation and enhance grip, but these gloves are limited and flawed. Although weight lifting gloves are able to enhance grip of the user, the gloves are not effective at preventing callouses. The gloves in the market are not made to solve the root cause of calluses, which is friction. The gloves on the market generally use foam, gels and padding to protect the hand. However, the commonly available one-layer design of the gloves cause the glove itself rub against the user's hand, thereby creating friction that may lead to callous formation. This friction may distract the user, causing the user to lose focus on the task of gripping. Sometimes these exercise gloves are not even able to prevent callous formation because the amount of friction applied to the user's hand and the weight lifting handle causes the user's hand to be stretched and pulled in the same manner as the textured or patterned metal grip does. The material used on the glove is generally a thick single layer, which means that the same fabric that is touching the user is also touching the weight grip.

[0006] Another deficiency in the gloves currently available on the market is that they are generally not built with the user's natural hand functionality in mind, which further reduces the user's efficiency where repetitive gripping is necessary. The term 'natural hand functionality' refers to a hand's sensitivity, breathability, grip and flexibility. While some of the prior art discloses partial hand coverage, they generally fail to implement a method to secure the gloves on the user's hand without stressing the user's hand. For example, U.S. Pat. No. 1,887,278, issued to Auster, discloses a glove which covers half of the palm is secured on the finger. However, this securing method does not hold the gloves in place. Furthermore the palm portion is free moving thus creating a distraction and discomfort for the user thus not providing 'natural hand functionality.'

[0007] Additionally, while U.S. Pat. No. 1,954,262, issued to Pottor, discloses a glove that covers only part of the hand to aid a golf player, Pottor secures the glove diagonally, which squeezes nerves on the side of the hand, creating discomfort. While there are many gloves which only partially cover the user's hand, they generally fail to implement a way to secure the glove which does not pinch nerves.

[0008] Another feature lacking in most gloves available on the market is the ability to provide proper ergonometric guidance to enhance gripping and reduce torque on the wrist. In strength training, the wrist bears a lot of the pressure in most pushing movements and there is a natural tendency to bend the wrist while pushing, which can be harmful. Thus a glove with proper ergonometric guidance may reduce the stress on the user's wrists and can enhance proper lifting technique. Some gloves on the market attempt to remedy this deficiency by using foam/gels and padding to better guide the user's hands, but the increased materials may end up hurting the user because the increased circumference added by the padding reduces hand sensitivity and eventually reduces grip in the long run after repetitive use. A basic principle of wrist pressure is that the more weight that is placed near the fingers may create an undesirable torque in pushing movements.

[0009] Therefore, there remains a long felt need in the art for an exercise glove, which when used in weight lifting, reduces callous formation, provides increased natural hand functionality, and provides proper ergonomic guidance.

BRIEF SUMMARY OF THE INVENTION

[0010] To minimize the limitations in the cited references, and to minimize other limitations that will become apparent upon reading and understanding the present specification, the following discloses an exercise glove, which provides a user with protection against callous formation while gripping handles for weight lifting, hammering, and other gripping activities by reducing the amount of friction experiences by the user's hand.

[0011] In one embodiment, when worn on a user's hand during weight lifting, the new exercise glove may provide protection against the formation of callouses using a minimal amount of material and due to the unique configuration of high friction causing and low friction causing surfaces. High friction causing surface may be in contact with the user's hand and item to be gripped, while a low friction causing surfaces may be in contact with one another, allowing for stress to be distributed across a greater portion of the user's hand.

[0012] In one embodiment, the new exercise glove may increase comfort of the hand of the user because a constricting or squeezing force may be excluded from the glove, which reduces the pinching of the nerves on the hand. This may be done by using a curved seam behind the knuckles, which may resistably engage the knuckles when an item is gripped.

[0013] In one embodiment, because of the two-layer palm system, the base of the new exercise glove may be rolled towards the fingers to cause a wedge to be formed. This wedge may enhance gripping technique and stop a barbell from rolling towards the user's fingers, thereby promoting proper form and technique, especially in the wrist.

[0014] In one embodiment, the new glove has a minimalist construction design and only covers the fingers, knuckles, and a partial portion of the palm. Accordingly, the disclosed exercise glove may be comfortable and may feel as if the user is not even wearing a glove.

[0015] It is an object of the new glove to overcome the limitations of the prior art.

[0016] One embodiment of the new exercise glove may comprise: an exercise glove, comprising: a palm portion; a dorsal portion; a knuckles portion; and a fingers portion. The fingers portion may comprise a plurality of finger holes, an upper fingers portion, an under fingers portion, and a webbing fingers portion. The dorsal portion and the knuckles portion may be connected at a first seam. The first seam may run substantially along a back of a hand of a user. The palm portion may comprise two layers, a first layer and a second layer. The first layer and the second layer may have a low amount of friction between them, such that when a user dons the exercise gloves the low amount of friction between the first layer and the second layer substantially prevents callous formation on the hand of the user.

[0017] In another embodiment, the palm portion may be constructed from a single piece of material; and the two layers may be created by folding the single piece of material.

[0018] In another embodiment, the first layer may comprise a first top surface and a first bottom surface. The first top surface may be configured to be in contact with a portion of a palm of the user. The second layer may comprise a second top surface and a second bottom surface; and the second bottom surface may be configured to be in contact with an object to be gripped. The first top surface preferably has a high amount of friction with the palm of the user. Preferably, the second bottom surface has a high amount of friction with the object to be gripped. The knuckles portion may be constructed from a substantially flexible and elastic material, such that the exercise glove is substantially prevented from inadvertently slipping off the hand of the user.

[0019] In another embodiment, the dorsal portion may constructed from a substantially inelastic and semi-rigid material, such that the exercise glove is substantially prevented from inadvertently slipping off the hand of the user.

[0020] In another embodiment, the first seam may be curved and is configured to rest behind a plurality of first knuckles of the user, such that when the user is gripping an object, the seam substantially prevents the exercise glove from inadvertently slipping off the hand of the user by resistibly engaging the bones of the user.

[0021] In another embodiment, the knuckles portion is constructed from a substantially flexible and elastic material, wherein the dorsal portion is constructed from a substantially inelastic and semi-rigid material, and wherein the first seam is substantially curved along the back hand of the user, such that

an arc tensioning system is created, which substantially prevents the glove from inadvertently slipping off the hand of the user.

[0022] In another embodiment, the exercise glove may further comprise a tab, wherein the tab may provide the user with a point of contact to don the exercise glove more easily.

[0023] In another embodiment, the under fingers portion may comprise a plurality of second knuckle tabs, wherein the second knuckle tabs extend the under fingers portion to a distal end of a plurality of second knuckles of the user, and wherein the upper fingers portion and the webbing fingers portion extend to a proximal end of the plurality of second knuckles of the user, such that the under fingers portion extends further along a plurality of fingers of a user than the upper fingers portion and the webbing fingers portion. Alternatively, the finger portions may extend along the entire length of the user's fingers.

[0024] In another embodiment of the exercise glove, the palm portion of the exercise glove may be configured to form a wedge, which may provide better ergonomic support for the user's hand by helping guide the user to place the weight towards the bottom of the palm towards the wrists.

[0025] Other features and advantages are inherent in the exercise glove claimed and disclosed will become apparent to those skilled in the art from the following detailed description and its accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0026] FIG. 1a shows a top view of one embodiment of the exercise glove with a user's right hand in the exercise glove. [0027] FIG. 1b shows a top view of one embodiment of the exercise glove.

[0028] FIG. 2a shows a bottom view of one embodiment of the exercise glove with a user's right hand in the exercise glove.

[0029] FIG. 2b shows a bottom view of one embodiment of the exercise glove.

[0030] FIG. 3a shows a right side view of one embodiment of the exercise glove with a user's right hand in the exercise glove.

[0031] FIG. 3b shows a right side view of one embodiment of the exercise glove.

[0032] FIG. 4a shows a left side view of one embodiment of the exercise glove with a user's right hand in the exercise glove.

[0033] FIG. 4b shows a left side view of one embodiment of the exercise glove with a user's hand.

[0034] FIG. 5a shows a front view of one embodiment of the exercise glove with a user's right hand in the exercise glove.

[0035] FIG. 5b shows a front view of one embodiment of the exercise glove.

[0036] FIG. 6 is a cross sectional view of the exercise gloves taken along lines 6-6 of FIG. 2b in the direction of the arrows

DETAILED DESCRIPTION OF ILLUSTRATIVE EMBODIMENTS

[0037] In the following detailed description of various embodiments of the invention, numerous specific details are set forth in order to provide a thorough understanding of various aspects of one or more embodiments of the invention. However, one or more embodiments of the invention may be

practiced without some or all of these specific details. In other instances, well-known methods, procedures, and/or components have not been described in detail so as not to unnecessarily obscure aspects of embodiments of the invention.

[0038] While multiple embodiments are disclosed, still other embodiments of the present invention will become apparent to those skilled in the art from the following detailed description, which shows and describes illustrative embodiments of the invention. As will be realized, the invention is capable of modifications in various obvious aspects, all without departing from the spirit and scope of the present invention. Accordingly, the graphs, figures, and the detailed descriptions thereof, are to be regarded as illustrative in nature and not restrictive. Also, the reference or non-reference to a particular embodiment of the invention shall not be interpreted to limit the scope of the invention.

[0039] Before the present invention is disclosed and described, it is to be understood that this invention is not limited to the particular structures, process steps, or materials disclosed herein, but is extended to equivalents thereof as would be recognized by those ordinarily skilled in the relevant arts. It should also be understood that terminology employed herein is used for the purpose of describing particular embodiments only and is not intended to be limiting. [0040] In the following description, certain terminology is used to describe certain features of one or more embodiments of the invention. For example, a surface that is "substantially" flat would mean that the object is either completely flat or nearly completely flat. The exact allowable degree of deviation from absolute completeness may in some cases depend on the specific context. However, generally speaking, the nearness of completion will be so as to have the same overall result as if absolute and total completion were obtained. The use of "substantially" is equally applicable when used in a negative connotation to refer to the complete or near complete lack of an action, characteristic, property, state, structure, item, or result.

[0041] As used herein, the term "seam" generally refers to the line created joining two pieces of fabric, cloth, or material. As used herein, the term "knuckles" generally refers to the joints behind the base of each finger. As used herein, the term "first knuckle" generally refers to the joint behind the base of each finger. As used herein, the term "second knuckle" generally refers to the joints of the fingers adjacent to the first knuckle. As used herein, the term "dorsal" generally refers to the back of the hand, between the knuckles and the wrist. As used herein, the term "palm" generally refers to the front of the hand, opposite the dorsal or back of the hand. As used herein, the term "layer" generally refers to a single sheet of fabric, cloth, or material. A layer, as used herein, may generally be flexible. As used herein, the term "friction" generally refers to the force caused when two objects are in contact and resists motion of the two objects relative to one another. As used herein, the term "friction amount" generally refers to the level of friction caused by the two objects being in contact. As used herein, the term "low amount of friction" generally means that the amount of friction is not particular strong and the two objects that have a low amount of friction between them may slide against one another with relative ease. As used herein, the term "high amount of friction" generally means that the amount of friction is strong and the two objects that have a high amount of friction between them do not easily slide against one another. As used herein, the term "surface" generally refers to one side of a layer. Generally a layer has two sides, and therefore, two surfaces. As used herein, the term "contact plane" generally refers to the portions of two surfaces of two separate layers that are touching one another. As used herein, a contact plane need not be flat, and may conform to a curve, and may be flexible. The contact plane may also be substantially contoured or conforming to the user's hand and/or an item to be gripped.

[0042] As used herein, the phrase "an item to be gripped" generally refers to anything a user holds while wearing the exercise glove. This may be a handle or gripping portion of an item to be lifted. Often this may be a barbell handle, dumbbell handle, or other exercise equipment handle. As used herein, the term "gripping material" generally refers to the materials normally used in weight lifting gloves on the palm and fingers to prevent callous formation and enhance grip. This material may be leather or any other material which allows the wearer to grip objects or prevent callouses.

[0043] As used herein, a plurality of items, structural elements, compositional elements, and/or materials may be presented in a common list for convenience. However, these lists should be construed as though each member of the list is individually identified as a separate and unique member. Thus, no individual member of such list should be construed as a de facto equivalent of any other member of the same list solely based on their presentation in a common group without indications to the contrary.

[0044] FIG. 1a shows a top view of one embodiment of the exercise glove with a user's right hand in the exercise glove. As shown in FIG. 1a, the exercise glove 100 on a hand 105 comprises: a knuckles portion 110; a dorsal portion 115; fingers portion 118; under fingers portion 120; upper fingers portion 125; webbing fingers portion 130; tab 135; first seam 140; finger seams 602, thumb side seam 600, and pinky side seam 601.

[0045] The knuckles portion 110 may comprise a thin, lightweight, elastic, and flexible material. The knuckles portion 110 may cover the portion of the hand between the base of the fingers to slightly behind the first knuckles, or the area between the one or more upper portions of one or more fingers portion 118 and the dorsal portion 115 on the back of the hand.

[0046] The dorsal portion 115 may comprise a material which is flexible, but which is substantially not stretchable or elastic. The dorsal portion 115 may cover a portion of the back of the hand extending from the knuckles portion 110. The amount of the back of the hand covered by the dorsal portion 115 may be minimal, extending only a couple millimeters from the edge of the knuckles 110 portion to covering other portions of the back of the hand. The fingers portion 118, as shown, comprise: the under fingers portion 120; the upper fingers portion 125; and the webbing fingers portion 130. The three portions 120, 125, 130 of the fingers portion 118 may all be the same material, may be different materials, may be single continuous piece of material, and/or may be sewn, glued, or otherwise permanently affixed together. In one embodiment, the under fingers portion 120 may be a gripping material. In one embodiment, the webbing fingers portion 130 may be an elastic, stretchable, and/or mesh material, which may allow for a better fit and more breathability of the fingers portion 118. In one embodiment, the top fingers portion 125 may be an elastic, stretchable, and/or mesh material. Alternatively, for ease of construction and manufacture the top fingers portion 125 may be the same material as the

knuckles portion 110. In one embodiment, the fingers portion 118 may extend the entire length of the user's fingers.

[0047] The tab 135 may be substantially any material appropriate for use in a glove. As shown, the tab 135 may be configured to have a loop or hollow portion such that a set of keys or other types of object may be easily secured to the exercise glove 100. The objects may also be secured via a key ring or a carabiner, which may connect to the tab 135. The tab 135 may also be used to allow for easier putting on of the exercise glove 100 by giving the user a point of contact to don the glove with the opposite hand.

[0048] The first seam 140 may be a seam between the knuckles portion 110 and the dorsal portion 115. The first seam 140 may be curved towards encompassing the knuckles portion 110. The first seam 140 may be semi-rigid to create an arc tensioning system. The first seam 140 may be made semi-rigid through various methods. One method of making the first seam 140 semi-rigid is by using a substantially inelastic and substantially rigid or semi-rigid material for the dorsal portion 140. Alternatively, a patch, insert, or semi-rigid addon may be added along next to, or within the first seam 140, such as, but not limited to, a substantially inelastic swatch of fabric. In addition to the semi-rigid first seam 140, the arc tensioning system is enhanced by using a stretchable or elastic fabric on the knuckles portion 110.

[0049] The combination of a semi-rigid first seam 140 and a stretchable or elastic fabric knuckles portion 110 prevents, or substantially results in, the exercise glove 100 not falling off the hand 105 when the hand 105 is being used to grip and lift or otherwise forming a fist. When in a fist or gripping, the knuckles of the hand 105 protrude upwards, stretching the elastic knuckles portion 110. The knuckles of the user may then effectively act as a barrier, such that the semi-rigid first seam 140 prevents the glove 100 from falling off or slipping off the hand 105. This embodiment of the glove means that the user does not have to use strong compression elastics or uncomfortable straps to keep the glove 100 on a user's hand. The elastic material of the knuckles portion 110 preferably does not have a strong compression force and any compression force it may have is not the reason that the glove 100 stays on the user's hand. In this manner the glove 100 is comfortable to wear, even for extended periods of time and substantially does not compress the hand or fingers of the user or pinch the nerves of the user.

[0050] FIG. 1b shows a top view of one embodiment of the exercise glove. The exercise glove 100 of FIG. 1b is the same as shown in FIG. 1a, but is not shown being worn on a hand 105 of the user.

[0051] FIG. 2a shows a bottom view of one embodiment of the exercise glove with a user's right hand in the exercise glove. As shown in FIG. 2a, the exercise glove 100 further comprises a palm portion 245. As shown in FIG. 6, the palm portion 245 of the exercise glove 100 may have two or more layers. As shown in FIG. 2a, the palm portion 245 may be configured to not cover the entirety of the palm of the hand 105, and preferably stops coverage perpendicular to the base of the thumb.

[0052] FIG. 2b shows a bottom view of one embodiment of the exercise glove. The exercise glove 100 of FIG. 2b is the same as shown in FIG. 2a, but is not shown being worn on a hand 105 of the user. FIGS. 2a and 2b, shows how the under fingers portion 120 may comprise a second knuckle tab 246. As shown, the second knuckle tab 246 preferably extends the under fingers portion 120 beyond the webbing fingers portion

130 and top fingers portion 125. In this embodiment, the top part of a user's second knuckles are substantially unencumbered and the palm or bottom portion of the second knuckles of the user are covered and/or protected.

[0053] FIG. 3a shows a right side view of one embodiment of the exercise glove with a user's hand in the exercise glove. As shown in FIG. 3a, the exercise glove 100 may further comprise: a second seam 350; and a third seam 355. The second seam 350 may hold the palm portion 245 and the knuckles portion 110 and/or fingers portion 118 together. Where the material used is a continuous piece of material between portions 245, 110, and 118, no second seam 350 would be required or would be present. Additionally, the location of the second seam 350 may be adjusted. The third seam 355 may connect the palm portion 245 and the dorsal portion 115 together. As shown in FIGS. 3a, 3b, 4a, and 4b, the dorsal portion 115 and the palm portion 245 are preferably a single piece of material that is connected to itself at seam 355. Seam 355 is placed on the pinky side of hand 105 for comfort and may be placed at any location on the glove 100. [0054] Where the knuckles portion 110 and the fingers portion 118 are different materials or separate pieces that are then sewn or otherwise permanently affixed, an additional seam may be used to connect the knuckles portion 110 to the portions 120, 125, 130 of the fingers portion 118.

[0055] FIG. 3b shows a right side view of one embodiment of the exercise glove. The exercise glove 100 of FIG. 3b is the same as shown in FIG. 3a, but is not shown being worn on a hand 105 of the user.

[0056] FIG. 4a shows a left side view of one embodiment of the exercise glove with a user's hand in the exercise glove. As shown in FIG. 4a, the exercise glove 100 may further comprise: a fourth seam 460. The fourth seam 460 may be configured to connect the knuckles portion 110 and/or the fingers portion 118 to the palm portion 245. As shown in FIG. 4a, the palm portion 245 may cover only a portion of the palm of the hand 105, and preferably not substantially past the base of the user's thumb, and may extend towards the dorsal portion 115. While there may be a seam between the palm portion 245 and dorsal portion 115, if a continuous piece of material is used between the portions, as shown in FIGS. 4a and 4b, there may be no seam. Thus, in configuration shown there may not necessarily be a precise border or demarcation to differentiate between the dorsal portion 115 and the palm portion 245.

[0057] FIG. 4b shows a left side view of one embodiment of the exercise glove with a user's hand. The exercise glove 100 of FIG. 4b is the same as shown in FIG. 4a, but is not shown being worn on a hand 105 of the user.

[0058] FIG. 5a shows a front view of one embodiment of the exercise glove with a user's right hand in the exercise glove.

[0059] FIG. 5b shows a front view of one embodiment of the exercise glove, but is not shown being worn on a hand 105 of the user. As shown in FIG. 5b, the exercise glove 100 further comprises finger holes 565. The finger holes 565 may be formed by the fingers portion 118 and may be configured to receive fingers. The webbing fingers portion 130 may define the sides of the finger holes 565. It should be understood that the present disclosure covers embodiments that would be worn by a user who may have lost one or more fingers or other portions of the hands.

[0060] FIG. 6 is a cross sectional view of one embodiment of the exercise glove 100 from FIG. 2b. FIG. 6 is not to scale, and has been expanded for the purposes of illustrating the

folded palm portion 650. Preferably, the under fingers portion 120 and palm portion 245 comprise the folded palm portion 650. Although under fingers portion 120 and palm portion 245 may be made from several different pieces of material that are sewn, glued, or otherwise affixed to each other, they are preferably made from a single piece of material. Further, although under fingers portion 120 and palm portion 245 may be a single layer, in a preferred embodiment under fingers portion 120 and palm portion 245 comprise two layers as the folded palm portion 650. As shown in FIG. 6, under fingers portion 120 and palm portion 245 comprise a single piece of material that has been folded to create the two layers of the folded palm portion 650.

[0061] As shown in FIGS. 1a, 1b, 2a, 2b, 3a, 3b, 4a, 4b, 6, the finger seams 602, thumb side seam 600, and pinky side seam 601 may attach the edges of the folded palm portion 650 to itself.

[0062] As shown in FIG. 6, the folded palm portion 650 of the exercise glove 100 may further comprise: a first layer 671; a second layer 672; and an interior portion 670. The first layer 671 may comprise a first top surface 675 and a first bottom surface 680. The second layer 672 may comprise a second top surface 685 and a second bottom surface 690.

[0063] As shown in FIG. 6, the folded palm portion 650 may be a single piece of material which is folded at one end to create the first layer 671 and the second layer 672. The combination of the first layer 671 and second layer 672 may create the interior portion 670. In one embodiment, the folded palm portion 650 may be intermittently sewn to itself at the finger seams 602, thumb side seam 600, and pinky side seam 601. This allows the folded palm portion 650 to hold its structure, yet not be restricted from sliding against itself. When a user dons the glove 100, the first layer 671 and the second layer 672 substantially form a contact plane as they are pressed together by the user's hand. The hand preferably slides in between the knuckles portion 110 and the first top surface 675, which then causes first and second layers 671, 672 to be pressed together. When a hand is placed inside the exercise glove 100 and the user grips or picks up an object, the first layer 671 is in contact with the user's hand and the second layer 672 is contact with the object, the first layer 671 may come into contact with the second layer 672, which may reduce the volume encompassed by the interior portion 670.

[0064] In various embodiments, the folded palm portion 650 may be a single type of material, may be two types of materials connected, or may be a single material with each of its surfaces different from the other.

[0065] When the first layer 671 and the second layer 672 are formed by folded palm portion 650 being folded, then the first top surface 675 and the second bottom surface 690 may be the same material and/or have the same texture. Similarly, in this embodiment, the first bottom surface 680 and the second top surface 685 may be the same material. When different materials are desired for the first layer 671 and the second layer 672, two pieces of fabric or two pieces of material may be sewn together or otherwise connected to achieve a two layer palm portion.

[0066] In one embodiment of the exercise glove 100, the first top surface 675 and the second bottom surface 690 may be a material which generally creates a high amount of friction. This may be accomplished by using leather, suede, faux leather, neoprene, foam, rubber, or any other material that has a tendency to create a high amount of friction. In this embodi-

ment, the user's hand and the object gripped substantially do not slip or slide relative to surfaces 675, 690.

[0067] In one embodiment of the exercise glove 100, the first bottom surface 680 and the second top surface 685 may be a slick or slippery material that has a low amount of friction. This may be accomplished by using polyester, nylon, Teflon® or any other types of materials or coatings that have a low amount of friction when used together. In this embodiment the folded palm portion 650 will slip and slide against itself, which will further prevent the folded palm portion 650 from slipping against the hand of the user, which substantially prevents or decreases callous formation on the user's hand. Additionally, the first bottom surface 680 and the second top surface 685 may be grooved to allow the first layer 671 and second layer 672 to slip and slide in the direction of the grooves, and resist sliding in directions not according to the grooves.

[0068] In one embodiment, the folded palm portion 650 is a single piece of material with one surface being low friction and one surface being high friction. In this embodiment, the first layer 671 and second layer 672 may be formed by folding the material used in the two layer palm portion 673 such that the first top surface 675 and second bottom surface 690 are the same high friction material. Additionally, in this configuration the first bottom surface 680 and second top surface 685 comprise the same low friction causing material. An additional benefit of this two-layer system created by a folded palm portion 650 is that the folded palm portion 650 may be rolled up along the user's hand to create a wedge which guides the user's placement and use of the item to be gripped.

[0069] One of the benefits of using a two layer system in the folded palm portion 650 as shown in FIG. 6 is that by allowing the first layer 671 and the second layer 672 to have low friction between them, they are able to slide against each other relatively easily, while the higher friction created between the two folded palm portion 650 and a hand and item to be gripped secure the hand relative to the item to be gripped. One effect of this configuration is reducing the amount of stress experienced by the skin on the palm of a user. If the item is gripped without a glove with a two layer configuration, such as bare handed or with a gloves of single layer design without the added low friction surfaces, then the weight of the item being gripped has the ability to pull on the skin of the palm and may cause bunching of skin near the base of the fingers. This may lead to callous formation. The two layer construction with a low friction contact plane helps prevent this skin pulling because the stress may be distributed through the entire area covered by the folded palm portion 650 and other portions of the hand, rather than a specific small portion of the

[0070] The foregoing written description is directed to an exercise glove configured to be worn on the right hand, but a simple minor image or otherwise modified version of the foregoing exercise glove would be wearable on the left hand. Additionally, was minor variations, a glove may be designed that may be worn on either the left or the right hand such that the glove may be deemed ambidextrous. This ambidextrous design may be beneficial over the prior art because it would create an exercise glove that may be worn on either hand, whereas exercise gloves that cover the thumb are not ambidextrous. In the interests of brevity, a detailed description for a left handed or ambidextrous glove has been excluded from

this description. The description of the right handed exercise glove is sufficient to disclose a left handed or ambidextrous exercise glove.

[0071] While the foregoing written description of the invention enables one of ordinary skill to make and use what is considered presently to be the best mode thereof, those of ordinary skill will understand and appreciate the existence of variations, combinations, and equivalents of the specific embodiment, method, and examples herein. The invention should therefore not be limited by the above described embodiment, method, and examples, but by all embodiments and methods within the scope and spirit of the invention as claimed.

[0072] The foregoing description of the embodiment of the invention has been presented for the purposes of illustration and description. While multiple embodiments are disclosed, still other embodiments of the present invention will become apparent to those skilled in the art from the above detailed description, which shows and describes illustrative embodiments of the invention. As will be realized, the invention is capable of modifications in various obvious aspects, all without departing from the spirit and scope of the present invention. Accordingly, the detailed description is to be regarded as illustrative in nature and not restrictive. Also, although not explicitly recited, one or more embodiments of the invention may be practiced in combination or conjunction with one another. Furthermore, the reference or non-reference to a particular embodiment of the invention shall not be interpreted to limit the scope the invention. It is intended that the scope of the invention not be limited by this detailed description, but by the claims and the equivalents to the claims that are appended hereto.

[0073] Except as stated immediately above, nothing which has been stated or illustrated is intended or should be interpreted to cause a dedication of any component, step, feature, object, benefit, advantage, or equivalent to the public, regardless of whether it is or is not recited in the claims.

What is claimed is:

- 1. An exercise glove, comprising:
- a palm portion;
- a dorsal portion;
- a knuckles portion; and
- a fingers portion;
- wherein said fingers portion comprises a plurality of finger holes, an upper fingers portion, an under fingers portion, and a webbing fingers portion;
- wherein said palm portion comprises two layers, a first layer and a second layer; and
- wherein said first layer and said second layer have a low amount of friction between them, such that when a user dons said exercise gloves said low amount of friction between said first layer and said second layer substantially prevents callous formation on said hand of said user.
- 2. The exercise glove of claim 1, wherein said palm portion is constructed from a single piece of material; and
 - wherein said two layers are created by folding said single piece of material.
- 3. The exercise glove of claim 1, wherein said first layer comprises a first top surface and a first bottom surface;
 - wherein said first top surface is configured to be in contact with a portion of a palm of said user;
 - wherein said second layer comprises a second top surface and a second bottom surface; and

- wherein said second bottom surface is configured to be in contact with an object to be gripped.
- **4**. The exercise glove of claim **3**, wherein said first top surface has a high amount of friction with said palm of said user
- 5. The exercise glove of claim 3, wherein said second bottom surface has a high amount of friction with said object to be gripped.
- **6**. The exercise glove of claim **1**, wherein said knuckles portion is constructed from a substantially flexible and elastic material, such that said exercise glove is substantially prevented from inadvertently slipping off said hand of said user.
- 7. The exercise glove of claim 1, wherein said dorsal portion is constructed from a substantially inelastic and semirigid material, such that said exercise glove is substantially prevented from inadvertently slipping off said hand of said user
- 8. The exercise glove of claim 1, wherein said dorsal portion and said knuckles portion are connected at a first seam; wherein said first seam runs substantially along a back of a hand of a user; and
 - wherein said first seam is curved and is configured to rest behind a plurality of first knuckles of said user, such that when said user is gripping an object, said seam substantially prevents said exercise glove from inadvertently slipping off said hand of said user.
- 9. The exercise glove of claim 1, wherein said knuckles portion is constructed from a substantially flexible and elastic material, wherein said dorsal portion is constructed from a substantially inelastic and semi-rigid material, and wherein said first seam is substantially curved along said back hand of said user, such that an arc tensioning system is created, which substantially prevents said glove from inadvertently slipping off said hand of said user.
 - 10. The exercise glove of claim 1, further comprising a tab.
- 11. The exercise glove of claim 10, wherein said tab provides said user with a point of contact to don said exercise glove more easily.
- 12. The exercise glove of claim 1, wherein said under fingers portion comprise a plurality of second knuckle tabs, wherein said second knuckle tabs extend said under fingers portion to a distal end of a plurality of second knuckles of said user; and
 - wherein said upper fingers portion and said webbing fingers portion extend to a proximal end of said plurality of second knuckles of said user, such that said under fingers portion extends further along a plurality of fingers of a user than said upper fingers portion and said webbing fingers portion.
 - 13. An exercise glove, comprising:
 - a palm portion;
 - a dorsal portion;
 - a knuckles portion; and
 - a fingers portion;
 - wherein said fingers portion comprise a plurality of finger holes, an upper fingers portion, an under fingers portion, and a webbing fingers portion;
 - wherein said dorsal portion and said knuckles portion are connected at a first seam;
 - wherein said first seam runs substantially along a back of a hand of a user;
 - wherein said under fingers portion comprises a plurality of second knuckle tabs;

- wherein said plurality of second knuckle tabs extend said under fingers portion to a distal end of a plurality of second knuckles of said user;
- wherein said upper fingers portion and said webbing fingers portion extend to a proximal end of said plurality of second knuckles of said user, such that said under fingers portion extends further along a plurality of fingers of a user than said upper fingers portion and said webbing fingers portion;
- wherein said dorsal portion and said knuckles portion are connected to form a first seam:
- wherein said palm portion comprises two layers, a first layer and a second layer; and
- wherein said first layer and said second layer have a low amount of friction between them, such that when a user dons said exercise gloves said low amount of friction between said first layer and said second layer substantially prevents callous formation on said hand of said user.
- **14**. The exercise glove of claim **13**, wherein said palm portion is constructed from a single piece of material;
 - wherein said two layers are created by folding said single piece of material;
 - wherein said first layer comprises a first top surface and a first bottom surface;
 - wherein said first top surface is configured to be in contact with a portion of a palm of said user;
 - wherein said second layer comprises a second top surface and a second bottom surface;
 - wherein said second bottom surface is configured to be in contact with an object to be gripped;
 - wherein said first top surface has a high amount of friction with said palm of said user; and
 - wherein said second bottom surface has a high amount of friction with said object to be gripped.
- 15. The exercise glove of claim 14, wherein said knuckles portion is constructed from a substantially flexible and elastic material, such that said exercise glove is substantially prevented from inadvertently slipping off said hand of said user.
- 16. The exercise glove of claim 14, wherein said dorsal portion is constructed from a substantially inelastic and semirigid material, such that said exercise glove is substantially prevented from inadvertently slipping off said hand of said user.
- 17. The exercise glove of claim 14, wherein said first seam is curved and is configured to rest behind a plurality of first knuckles of said user, such that when said user is gripping an object, said seam substantially prevents said exercise glove from inadvertently slipping off said hand of said user.
- 18. The exercise glove of claim 14, wherein said knuckles portion is constructed from a substantially flexible and elastic material, wherein said dorsal portion is constructed from a substantially inelastic and semi-rigid material, and wherein said first seam is substantially curved along said back hand of said user, such that an arc tensioning system is created, which substantially prevents said glove from inadvertently slipping off said hand of said user.
- 19. The exercise glove of claim 14, further comprising a tab;
 - wherein said tab provides said user with a point of contact to don said exercise glove more easily.

- 20. An exercise glove, comprising:
- a palm portion;
- a dorsal portion;
- a tab;
- a knuckles portion; and
- a fingers portion;
- wherein said fingers portion comprise a plurality of finger holes, an upper fingers portion, an under fingers portion, and a webbing fingers portion;
- wherein said dorsal portion and said knuckles portion are connected at a first seam;
- wherein said first seam runs substantially along a back of a hand of a user;
- wherein said under fingers portion comprises a plurality of second knuckle tabs;
- wherein said plurality of second knuckle tabs extend said under fingers portion to a distal end of a plurality of second knuckles of said user;
- wherein said upper fingers portion and said webbing fingers portion extend to a proximal end of said plurality of second knuckles of said user, such that said under fingers portion extends further along a plurality of fingers of a user than said upper fingers portion and said webbing fingers portion;
- wherein said dorsal portion and said knuckles portion are connected to form a first seam;
- wherein said palm portion comprises two layers, a first layer and a second layer;
- wherein said first layer and said second layer have a low amount of friction between them, such that when a user dons said exercise gloves said low amount of friction between said first layer and said second layer substantially prevents callous formation on said hand of said user;
- wherein said palm portion is constructed from a single piece of material;
- wherein said two layers are created by folding said single piece of material;
- wherein said first layer comprises a first top surface and a first bottom surface;
- wherein said first top surface is configured to be in contact with a portion of a palm of said user;
- wherein said second layer comprises a second top surface and a second bottom surface;
- wherein said second bottom surface is configured to be in contact with an object to be gripped;
- wherein said first top surface has a high amount of friction with said palm of said user;
- wherein said second bottom surface has a high amount of friction with said object to be gripped;
- wherein said knuckles portion is constructed from a substantially flexible and elastic material, wherein said dorsal portion is constructed from a substantially inelastic and semi-rigid material, and wherein said first seam is substantially curved along said back hand of said user, such that an arc tensioning system is created, which substantially prevents said glove from inadvertently slipping off said hand of said user; and
- wherein said tab provides said user with a point of contact to don said exercise glove more easily.

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