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(54) **HAND PROTECTOR FOR SLIDING**
(71) Applicant: **Josh Miranda**, North Hills, CA (US)
(72) Inventor: **Josh Miranda**, North Hills, CA (US)
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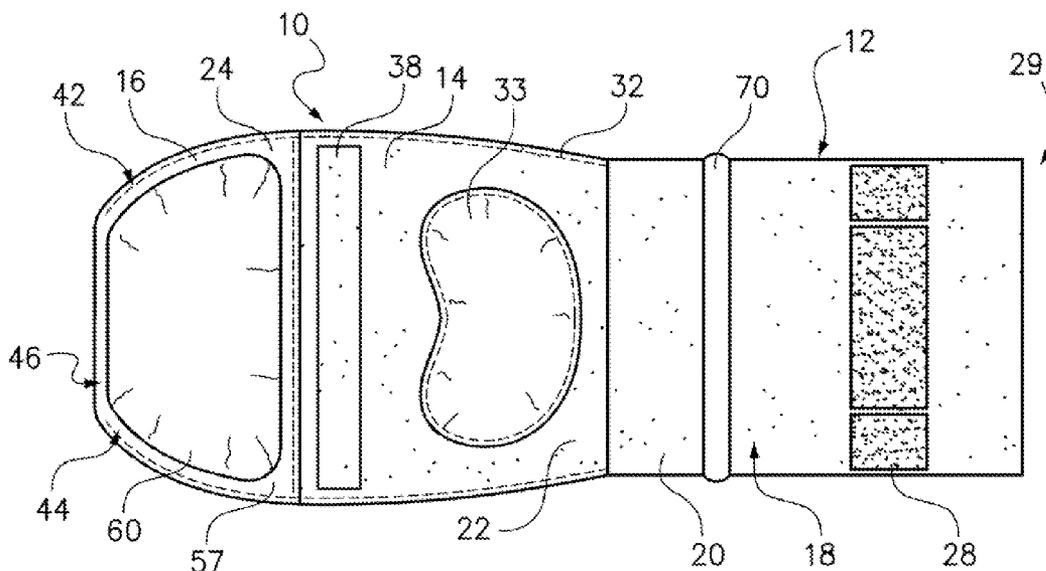
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(57) **ABSTRACT**

A wrist band with a finger pocket and palm padding for the protection of baseball and/or softball player's palms and fingers when sliding into a base. The wrist band comprises a tubular portion worn around the wrist. Extending from the tubular portion is a palm portion that extends into a finger portion. The palm portion comprises padding for a player's palm. The palm portion and/or the finger portion is reinforced with an abrasion-resistant material and/or protective plates.

Publication Classification

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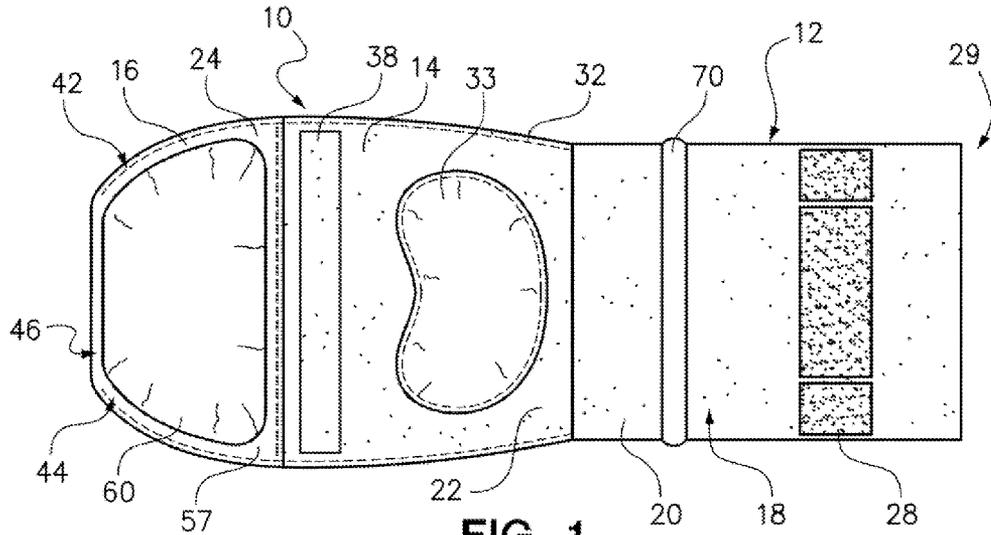


FIG. 1

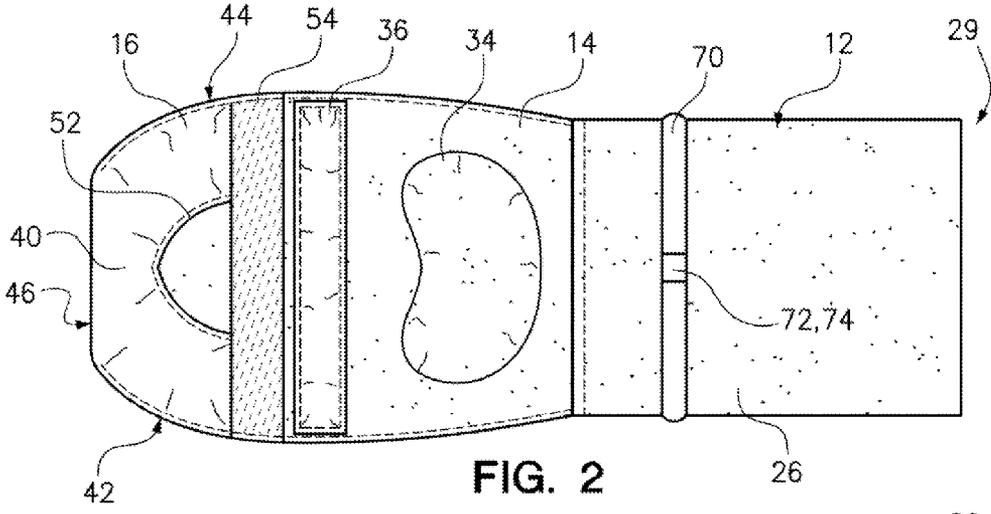


FIG. 2

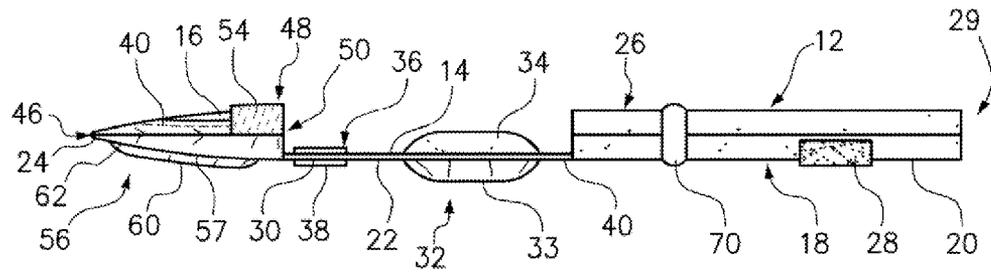
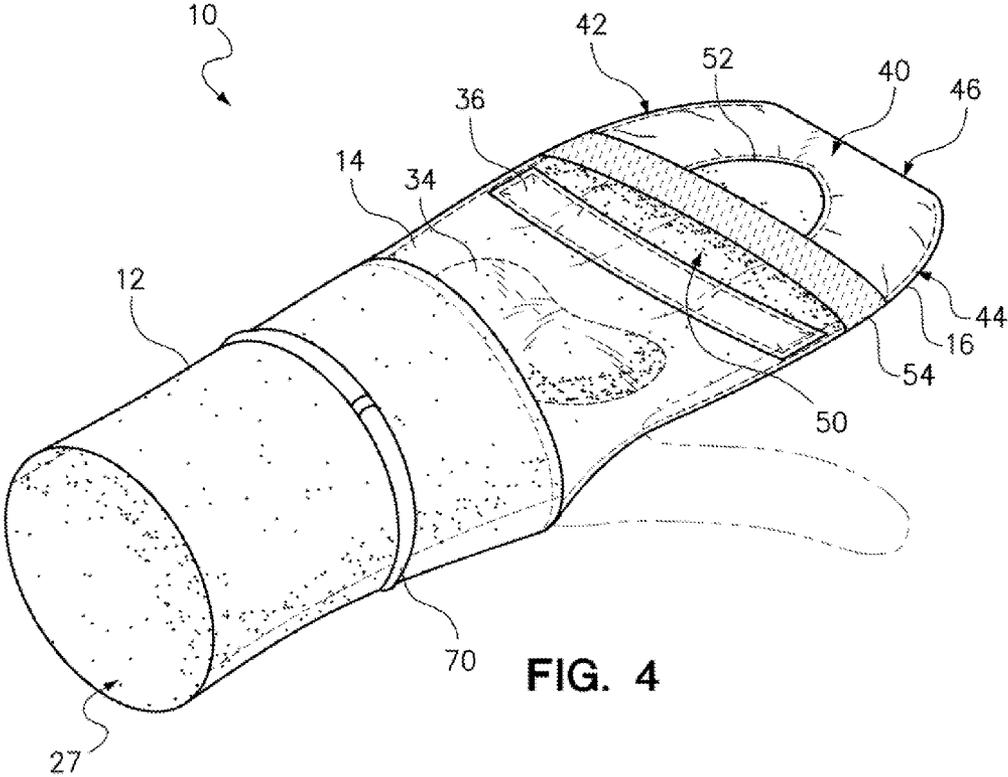


FIG. 3



HAND PROTECTOR FOR SLIDING

FIELD OF THE INVENTION

[0001] The present invention relates generally to gloves worn during participation in athletic sporting events, and more particularly, to a wrist band with a finger portion and palm portion for the protection of a baseball and/or softball player's palms and fingers while sliding into a base, or any other sport or activity in which a person may slide on the ground.

BACKGROUND OF THE INVENTION

[0002] It is routine in the game of baseball and/or softball for players to slide into bases. Players slide into bases because, under the rules of baseball and/or softball, a defending baseman must typically "tag" the base runner "out." This rule applies in virtually all situations except where the base runner is forced to run. (For example, a runner on first base, must run to second upon a hit by the next batter. In this situation, the second baseman need only "tag the bag" to get the runner out.) In order to avoid being tagged out, a base runner will often choose to slide into a base. Often, the slide is a feet-first slide, in which a player will typically use one hand to provide balance during the slide. In other situations, the slide may be a diving head-first slide in which the player's arms are outstretched in an effort to touch the base before being tagged.

[0003] In either of the above scenarios, the player's fingers and palms are subject to abrasion injuries caused by sliding contact between the player's hands and the playing field. In many cases, such injuries are limited to bruised fingers and palms. Less frequently, the abrasion caused by sliding may wear away or tear the outer layer of skin on a player's palm or fingers, which could potentially lead to bleeding and possibly an infection.

[0004] One solution to the aforementioned problem would be for players to wear gloves. Although many types of batting gloves are known in the art, some of these have open finger portions and therefore provide little or no protection to a player's fingers while sliding. Other players may wear full-fingered batting gloves while on base, but such gloves can be torn up if players use them for protection while sliding, and once torn up, they are rendered useless. Also, many players prefer not to wear gloves when at bat. Thus, there is a need in the art for a protective device that can be worn as a wrist band when a player is at bat, and can be subsequently unfolded and worn like a protective mitten when a player is on base. The protective device can also be worn over a batting glove.

SUMMARY OF THE INVENTION

[0005] The invention is a protective wrist band with a tubular portion, a finger portion and a palm portion which serves to protect a baseball and/or softball player's fingers and palm when sliding into a base. The protective wrist band is worn around the wrist and has a folded and unfolded position. In the folded position, the palm padding and finger pocket fold along the side of the wrist band and are held fast to the wrist band by means of, for example, hook and loop fasteners (i.e., Velcro®). The finger portion and/or palm portion can also be wrapped around the tubular portion, tucked into the tubular portion, tucked into a pocket of the tubular portion, or otherwise fastened securely to the tubular portion. In the unfolded or deployed position, the palm padding and finger pocket

extend outwardly from the wrist band. Players may choose to leave the wrist band in the folded position until they get on base. Thereafter, they may unfold the wrist band and insert their fingers into a protective finger pocket of the finger portion in anticipation of having to slide into further bases. Alternatively, the finger pocket of the wrist band is sized such that the unfolded wrist band may be worn over a batting glove.

[0006] The wrist band comprises a tubular portion worn around the wrist. Extending from the tubular portion is a palm portion which, in turn, extends into a finger portion. The finger portion may comprise a finger pocket. The finger pocket may be sized so that the wrist band can be worn over a batting glove. The palm portion comprises padding for a player's palm. The palm padding is typically absent from, or substantially limited in, standard batting gloves. The palm portion and/or the finger portion are equipped or reinforced with an abrasion resistant material, such as leather, canvas, or a variety of tough synthetic fabrics, including neoprene and Kevlar, and/or a protective plate.

BRIEF DESCRIPTION OF THE DRAWINGS

[0007] FIG. 1 is a bottom (palms up) view of the wrist band with palm padding and a finger pocket of the present invention.

[0008] FIG. 2 is top view (palms down) of the wrist band of FIG. 1.

[0009] FIG. 3 is a side view of the wrist band of FIG. 1.

[0010] FIG. 4 is a perspective view of the wrist band of FIG. 1.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0011] The detailed description set forth below, or elsewhere herein, including any figures, is intended as a description of presently-preferred embodiments of the invention and is not intended to represent the only forms in which the present invention may be constructed or utilized, nor is it intended to limit the scope of any claims based thereon.

[0012] For ease of description, without being limiting, relative orientations will be described as if the invention of the present application was being properly worn on a user's hands with the user in the standing position with his hands outstretched in front of him perpendicularly to his body with his palms face down.

[0013] With reference to FIGS. 1-4, the present invention is a hand protector or wrist band 10 comprising a tubular portion 12, which allows the hand protector or wrist band 10 to be worn around a player's wrist, an intermediate or palm portion 14, and a finger portion 16. The wrist band 10 also has a bottom side 18, portions of which make contact with the surface of the playing field when a player is sliding into a base. In a preferred embodiment, the bottom side 18 of the wrist band 10 spans from the tubular portion 12 through the palm portion 14 to the finger portion 16. As such, the bottom side 18 comprises a bottom tubular portion 20, a bottom palm portion 22, and a bottom finger portion 24. Various portions on the bottom side 18 may be reinforced with a tough durable material to protect the player's fingers, hands, wrist, forearm, or any combination thereof. The wrist band 10 also includes an upper side 26 which does not generally make contact with the playing field. The upper side 26 may comprise a fastener so as to keep the wrist band 10 in a stowed configuration when not in use for sliding (e.g., while batting). Alternatively, the

tubular portion 12 may comprise a pocket, strap, or other mechanism for containing the palm portion 14 and the finger portion 16 in the stowed configuration.

[0014] The tubular portion 12 of the wrist band 10 may be made of a resilient expandable material that expands when stretched, yet returns to its original shape when the stretching force is removed. Being tubular, the tubular portion 12 defines an opening 27 through which the player can insert his hand to don the wrist band 10. The resilient expandable material expands to allow the hand through and creates a radially inward force as it tries to return to its original shape after the hand is through so as to cling to the wrist or forearm. Representative suitable materials for the tubular portion 12 are Lycra®, spandex, and neoprene, among others. The tubular portion 12 also includes a fastener 28. In a preferred embodiment, the fastener 28 is located on the bottom tubular portion 20. More preferably, the fastener 28 is positioned at the proximal end 29 of the wristband 10. The fastener 28 is preferably a quick attachment fastener, such as a hook-and-loop fastener, snap-button, adhesive, and the like. The wrist band 10, and in particular, the tubular portion 12, may be made in a variety of sizes to conform to the size of a player's hand and wrist.

[0015] Like the tubular portion 12, the palm portion 14 may also be made of a resilient material such as Lycra®, spandex, or neoprene. Alternatively, the palm portion 14 may be made of a more abrasion-resistant material such as leather, canvas, ballistic nylon, or the like. When the palm portion 14 is made of a relatively soft material such as spandex or neoprene, a bottom surface 30 of the bottom palm portion 22 may comprise a reinforcement portion 32. The reinforcement portion 32 may comprise an abrasion-resistant material 33, such as leather, canvas, ballistic nylon, or other similar materials. The reinforcement portion 32 may be attached to the bottom surface 30 of the bottom portion 22 of the palm portion 14 by means of stitching or adhesive bonding, or other means known to those of skill in the art.

[0016] Where exceptional resistance to abrasion is desired, the reinforcement portion 32 on the bottom surface 30 of bottom palm portion 22 of the wrist band 10 may comprise one or more substantially rigid protective plates 38. The protective plates 38 may be shaped to conform to the bottom surface 30 of the palm portion 14 and may be made from any number of plastic, wood, carbon fiber materials, metallic materials, or any other rigid material. Therefore, the bottom surface 30 of the bottom palm portion 22 may comprise the abrasion-resistant material 33, the protective plate 38, or both. In embodiments in which the bottom surface 30 of the bottom palm portion 22 comprises both the abrasion-resistant material 33 and the protective plate 38, the protective plate 38 may be fastened on the bottom surface 40 of the abrasion-resistant material 33 so as to provide some protection to the abrasion-resistant material 33. In other words, the protective plate 38 provides the first line of defense against abrasions from sliding, and the abrasion-resistant material 33 provides a second line of defense against abrasions from sliding. The protective plate 38 may cover all or a majority of the bottom palm portion 22 or just a small portion of the bottom palm portion 22. Similarly, the abrasion-resistant material 33 may cover all or a majority of the bottom palm portion 22, or a small portion of the bottom palm portion. In some embodiments, the bottom palm portion 22 may be made of the abrasion-resistant material 33.

[0017] The palm portion 14 further includes palm padding 34 on the upper side 26 that contacts the player's hand. The

palm padding 34 would ideally be made from a shock absorbing material. A variety of dense polymer foam materials would be suitable for the palm padding 34, and are known in the art. The palm padding 34 is shown in an exemplary embodiment as being kidney shaped. However, the padding 34 should not be construed as being limited to this shape. Any shape which provides cushioning for a player's palm is suitable. For ease of manufacturing, the palm padding 34 may be made square or rectangular in shape. In an exemplary embodiment, kidney shaped palm padding is shown. Just forward of the palm padding (i.e. towards the finger portion 16) may be a lateral strip of additional padding 36. This strip of padding 36 is optional, but serves a functional purpose in that it provides additional padding for embodiments of the invention that use the kidney shaped palm padding 34.

[0018] In the preferred embodiment, the palm portion 14 is open on the upper side 26. In other words, unlike the tubular portion 12, which wraps around the entire wrist, the palm portion 14 only covers the palm of the player's hand and not the back side of the hand. This open top side of the palm portion 14 facilitates the stowing and deploying feature as described below.

[0019] The finger portion 16 of the wrist band 10 comprises a bottom finger portion 24 and may further comprise an upper portion 40. The bottom and upper portions 24 and 40, are connected to each other at three edges, i.e. two opposite side edges 42 and 44 and at a distal edge or end edge 46 adjacent to the two side edges 42 and 44. (See FIG. 1.) An edge 48 of the upper portion 40 is left free so as to define a finger pocket 50. (See FIG. 4.) The upper portion 40 of the finger portion 16 comprises a cutout 52. In a preferred embodiment, the cutout is a v-shaped cutout 52 at the edge 48 of the upper portion that tapers towards the distal edge 46 that allows the finger pocket 50 to expand to better fit any particular player's hand. The finger pocket 50 may also be sized to be worn with a batting glove. In a preferred embodiment, running laterally across the upper portion 40 of the finger pocket 50 is a second fastener 54, such as a hook-and-loop fastener closure to fasten to fastener 28.

[0020] Like the palm portion 14, the finger portion 16 may also be made of a resilient material such as Lycra®, spandex or neoprene. If made from a soft material like Lycra® or spandex, the bottom finger portion 24 may be reinforced with a reinforcement portion 56. The reinforcement portion 56 may be made from an abrasion-resistant material 57, e.g. leather, canvas, ballistic nylon and the like. The reinforcement portion 56 may be attached to the bottom side 18 at the finger portion 16 by stitching, adhesive bonding, or like means. Alternatively, the finger portion 16 may be made entirely of an abrasion-resistant material 57.

[0021] Where exceptional resistance to abrasion is desired at the bottom finger portion 24 of the wrist band 10, the reinforcement portion 56 may comprise one or more substantially rigid protective plates 60 shaped to conform to the bottom finger portion 24. The protective plates 60 may be attached to a bottom surface 62 of the bottom finger portion 24. The protective plates 60 may be made from any number of plastic or carbon fiber materials, as well as metallic materials. The reinforcement portion 56 at the bottom finger portion 24 may, therefore, comprise the abrasion-resistant material 57, the protective plates 60, or both. Like the palm portion 14, if the reinforcement portion 56 at the bottom finger portion 24 comprises both the abrasion-resistant material 57 and the

protective plate 60, then the protective plate 60 may be fastened to the bottom side of the abrasion-resistant material 57.

[0022] As an optional accessory, the wrist band 10 may further comprise a compression band 70 to wrap around the tubular portion 12 at the wrist area. The compression band 70 provides compression to the wrist to provide stability and relieve stress at the wrist. The compression band 70 is preferably made from an elastic material, such as neoprene, or other like material. The compression band 70 may comprise fasteners 72, 74 at its free ends so that the compression band 70 can be wrapped around the wrist and fastened together.

[0023] As discussed, the wrist band 10 with palm padding and finger pocket of the present invention serves to protect a baseball and/or softball player's fingers and palm when sliding into a base. The protective wrist band 10 is worn around the wrist and has a folded (stowed) and unfolded (deployed) position. In the folded position, the palm portion 14 and the finger portion 16 fold along the side of the tubular portion 12 and are held fast to the tubular portion 12 by means of hook and loop fasteners 28 and 54. In the unfolded or deployed position, the palm portion 14 and the finger portion 16 extend outwardly from the tubular portion 12.

[0024] In use, the wrist band 10 is deployed and the player slides his hand through the opening 27 of the tubular portion 12 until his fingers reach the finger portion 16 with his palms abutting the palm portion 14. In this configuration, when the player slides the palm of his hand and/or his fingers are protected from abrasion. If the player does not need the protection of the wrist band 10, he can remove his fingers from the finger portion 16 and pass his hand through the opening in the palm portion 14. This allows the player to free his palms and fingers from the obstruction imposed by the palm portion 14 and finger portion 16 without having to completely remove the wrist band 10 altogether. This allows the player to fold the palm portion 14 and finger portion 16 into the stowed configuration by fastening one fastener 54 to the other 28. In some embodiments, the fasteners 28 and 54 may be arranged so that the palm portion 14 and/or the finger portion 16 can be wrapped around the player's wrist or the tubular portion 12, so as to avoid any loose portions from interfering or distracting the player, and fastened to the tubular portion 12, the palm portion 14, or the finger portion 16 as if his wrist were being bandaged. In some embodiments, the palm portion 14 and/or the finger portion 16 may be tucked into the opening 50 of the tubular portion so that the tubular portion 12 contains the palm portion 14 and finger portion 16. In some embodiments, the tubular portion may have a pocket into which the palm portion 14 and finger portion 16 can be stuffed into.

[0025] Therefore, the player can have the wrist band 10 in the stowed configuration with his hands and fingers free for batting. Once the player reaches a base, he can deploy the wrist band 10 and cover his fingers and palms in anticipation of sliding into the subsequent bases. The hand protector can be used in any other sport or activity in which a person may slide on the ground.

[0026] The foregoing detailed description and appended drawings are intended as a description of the presently preferred embodiments of the invention and are not intended to represent the only forms in which the present invention may be constructed and/or utilized. Those skilled in the art will understand that modifications and alternative embodiments of the present invention which do not depart from the spirit and scope of the foregoing specification and drawings, and of

the claims appended below are possible and practical. It is intended that the claims cover all such modifications and alternative embodiments.

1. A hand protector for sliding, comprising:
 - a. a tubular portion, the tubular portion comprising a first fastener;
 - b. a palm portion adjacent to the tubular portion;
 - c. a finger portion adjacent to the palm portion and opposite the tubular portion, the finger portion comprising a second fastener fastenable to the first fastener; and
 - d. a bottom side spanning from the tubular portion through the palm portion to the finger portion, the bottom side comprising a bottom tubular portion, a bottom palm portion, and a bottom finger portion.
2. The hand protector of claim 1, wherein the bottom side comprises a reinforcement portion.
3. The hand protector of claim 2, wherein the reinforcement portion 32 comprises an abrasion-resistant material.
4. The hand protector of claim 2, wherein the reinforcement portion comprises at least one substantially rigid protective plate.
5. The hand protector of claim 1, wherein the palm portion 1 further comprises a palm padding.
6. The hand protector of claim 7, wherein the palm portion further comprises a lateral strip of additional padding.
7. The hand protector of claim 1, wherein the finger portion of the wrist band comprises an upper portion attached to the bottom finger portion at a first side edge, a second side opposite the first side edge, and at a distal edge adjacent to the first and second side edges, so as to define a finger pocket.
8. The hand protector of claim 9, wherein the upper portion of the finger pocket comprises a cutout to allow the finger pocket to expand to better fit any particular player's hand.
9. The hand protector of claim 1, further comprising a compression band.
 10. A hand protector for sliding, comprising:
 - a. a tubular portion which allows the wrist band to be worn around a player's wrist area;
 - b. a palm portion adjacent to the tubular portion;
 - c. a finger portion adjacent to the palm portion and opposite the tubular portion; and
 - d. a bottom side spanning from the tubular portion through the palm portion to the finger portion, the bottom side comprising a bottom tubular portion, a bottom palm portion, and a bottom finger portion,
 - e. wherein the bottom side comprises a reinforcement portion.
 11. The hand protector of claim 10, wherein the reinforcement portion comprises an abrasion-resistant material.
 12. The hand protector of claim 10, wherein the reinforcement portion comprises at least one substantially rigid protective plate.
 13. The hand protector of claim 10, wherein the finger portion of the wrist band comprises an upper portion, wherein the bottom finger portion and the upper portion are attached to each other at a first side edge, a second side edge opposite the first side edge, and a distal edge adjacent to the first and second side edges, so as to define a finger pocket, wherein the upper portion of the finger portion comprises a cutout.
 14. The hand protector of claim 13, wherein the cutout is a v-shaped cutout to allow the finger pocket to expand to better fit any particular player's hand.
 15. The hand protector of claim 10, wherein the palm portion comprises a palm padding.

16. The hand protector of claim **15**, wherein the palm portion comprises a lateral strip of additional padding.

17. The hand protector of claim **10**, further comprising a compression band.

18. A protective handwear, comprising:

a. a tubular portion which allows the wrist band to be worn around a player's wrist;

b. a palm portion adjacent to the tubular portion;

c. a finger portion adjacent to the palm portion and opposite the tubular portion; and

d. a bottom side spanning from the tubular portion through the palm portion to the finger portion, comprising a bottom tubular portion, a bottom palm portion, and a bottom finger portion,

e. wherein the finger portion comprises an upper portion attached to the bottom finger portion at a first side edge, a second side edge opposite the first side edge, and a distal edge adjacent to the first and second side edges, so as to define a finger pocket, wherein the upper portion of the finger portion comprises a cutout.

19. The protective handwear of claim **18**, wherein the cutout is a v-shaped cutout to allow the finger pocket to expand to better fit any particular player's hand.

20. The protective handwear of claim **19**, wherein the bottom side comprises a reinforcement portion.

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