

[54] **PROTECTIVE FOOTGEAR FOR
KARATE PARTICIPANTS**

[72] Inventor: **Roy E. Hunderford**, 120 Christiansen,
Houston, Tex. 77003

[22] Filed: **Sept. 29, 1970**

[21] Appl. No.: **76,559**

[52] U.S. Cl. 36/4, 36/71

[51] Int. Cl. A43b 1/10, A61f 5/00

[58] Field of Search.....36/2.5 R, 4, 7.1, 9, 71, 2.5 A;
2/22

[56] **References Cited**

UNITED STATES PATENTS

2,724,676 11/1955 Randall et al. 36/4 X

2,697,886 12/1954 Spinali.....36/71
1,707,129 3/1929 McMurchy 36/71 X
3,190,016 6/1965 Hansjosten.....36/2.5 R

Primary Examiner—Patrick D. Lawson

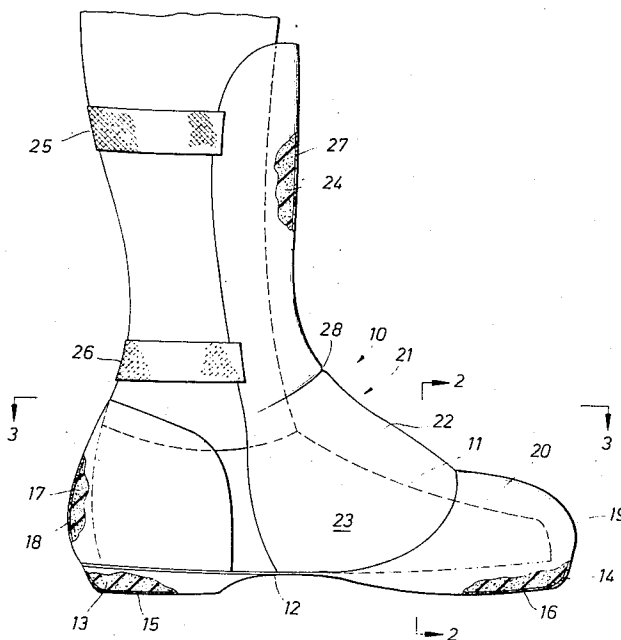
Attorney—Ernest R. Archambeau, Jr.

[57]

ABSTRACT

As a representative embodiment of the invention disclosed here, a boot or shoe is provided with protective pads around and under the heel, under the toe, and on the outward side of the shoe. Another pad is placed over the instep and adapted to extend upwardly therefrom to protect the shin of the wearer.

6 Claims, 3 Drawing Figures



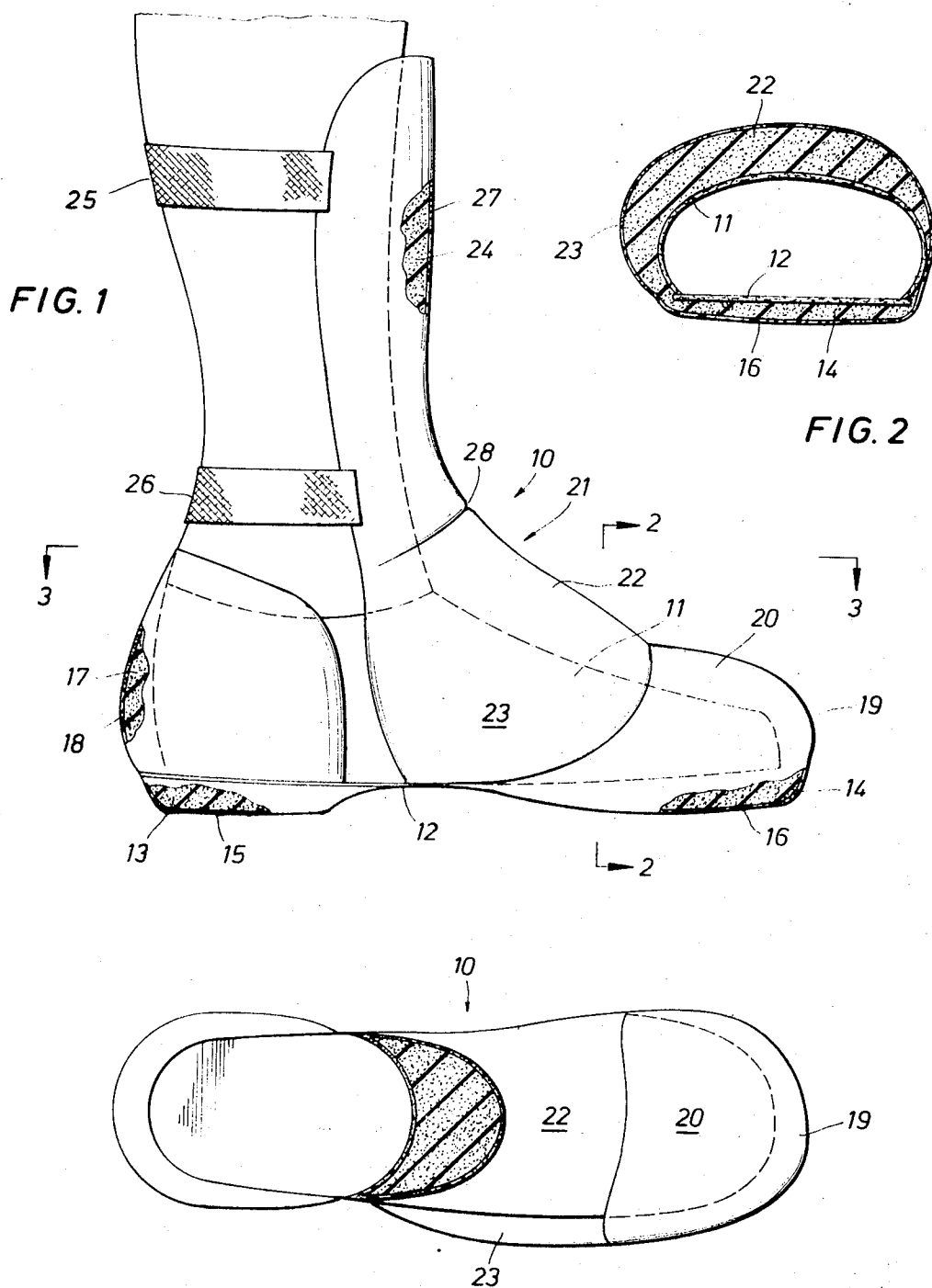


FIG. 3

Roy E. Hungerford
INVENTOR

BY *E. K. Achenbach Jr.*
ATTORNEY

PROTECTIVE FOOTGEAR FOR KARATE PARTICIPANTS

In the combative sport commonly known as karate, it is permissible to use the foot to strike or kick an opponent. Typically, this is done in one of five traditional manners. For example, to execute the so-called "koshi" kick, the toes are curled upwardly so that the ball of the foot will strike the opponent as the foot is forcibly driven forwardly. Similarly, to deliver the "haisoku" kick, the toes are curled downwardly so that as the foot is swung forwardly, the opponent will be struck by the instep of the attacker's foot. In the "sokuto" style of karate kicking, the leg and foot are turned sideways; and, as the leg is swung upwardly to one side, the outward edge of the foot between the heel and little toe will hopefully strike the opponent. The sole as well as the heel of the foot are also used as alternative modes for delivering sharp kicking blows to various portions of an opponent's body.

In the traditional Japanese style of karate, these various kicks are delivered with bare feet and, if properly executed, can be quite painful. Thus, to avoid deliverate injury, the time-honored technique in a non-combative or exhibition match has been to halt or slow the kick just before the foot meets the opponent's body. The match is then stopped while the officials judge the probable result of the blow had it been delivered with full force to that portion of the opponent's body. Once this decision is made, an appropriate number of points are credited to the aggressor and the match continues until another potentially successful kick is made by one of the combatants. It will be appreciated, of course, that by "pulling" the kicks in this manner, the risks of injuring the participants are greatly minimized. The match is, however, significantly slowed as the merits of each kick are evaluated.

To the average American sports fan, however, such traditional karate exhibitions are relatively uninteresting and slow in comparison to more-aggressive and fast-moving contests such as boxing, wrestling, and the like. The only crowd-pleasing alternative is, of course, to permit the opponents to battle without interrupting or pulling of the blows. Thus, since a skilled karate participant can deliver blows with his feet which are at least equal in power to those that can be delivered with a bare fist or hand, the traditional Japanese style of using only bare feet must be compromised if karate is to gain wide acceptance as a spectator sport in the United States.

Accordingly, it is an object of the present invention to provide new and improved padded footwear for karate participants which will permit the uninhibited use of the feet for striking an opponent without unduly risking injury to either participant.

This and other objects of the present invention are attained by providing a new and improved comfortably-fitting boot or shoe having strategically-located pads especially arranged thereon to protect the wearer as well as an opponent without unduly hampering the movements of the wearer.

The novel features of the present invention are set forth with particularity in the appended claims. The invention, together with further objects and advantages thereof, may be best understood by way of the following description of exemplary apparatus employing the principles of the invention as illustrated in the accompanying drawings, in which:

FIG. 1 depicts a preferred embodiment of a boot or shoe arranged in accordance with the principles of the present invention;

FIG. 2 is a cross-sectional elevational view taken along the lines 2—2 of FIG. 1; and

FIG. 3 is a cross-sectional plan view of the shoe depicted in FIG. 1 taken along the lines 3—3 thereof.

Turning now to FIG. 1, a preferred embodiment is shown of a boot or shoe 10 arranged in accordance with the principles of the present invention. As shown there, the shoe 10 includes a slipper-like foot-receiving upper portion 11 which is preferably sized to be snugly fitted onto the foot of a karate participant. Although laces or the like could just as well be used to retain the shoe 10 on the user's foot, it is preferred to

use an elastic band (not shown) which is adapted to fit firmly over the instep for holding the shoe on the user's foot.

It will, of course, be appreciated that several conflicting problems are presented in providing a satisfactory shoe which will provide adequate protection without hampering the agility of the wearer. For example, the sole 12 of the shoe 10 must be appropriately arranged so that the user will be free to move freely in about the same manner as with a conventional shoe. Nevertheless, sufficient protective padding must be arranged under the heel of the shoe 10 to provide for the so-called "kakato" kick which is typically delivered with a rearward kick of the heel. Similarly, the "koshi" kick which is delivered by driving the ball of the foot forwardly must also be considered. It has been found, however, that if the undersurface or sole 12 of the shoe 10 is covered with padding that is either too resilient or too bulky, the maneuverability of the wearer is unduly hampered. Conversely, if the bottom of the shoe 10 is protected with either a hard pad or only a thin layer of padding, the intended degree of protection is not realized.

Accordingly, in the preferred embodiment of the shoe 10 of the present invention, at least the heel and toe portions of the sole 12 of the foot-receiving slipper 11 are covered with pads 13 and 14 of a firm, but resilient, material such as foamed polyvinyl chloride. The pads 13 and 14 are in turn, covered with a thin layer of cloth, leather or some leather-like synthetic material, as at 15 and 16, that is stitched to the slipper 11.

The softer foamed rubbers or foamed plastics (such as polyurethane in its usual form or the like) have been found to be too soft for the pads 13 and 14 to provide stable footing for the wearer. It will, of course, be appreciated that there are other elastomeric materials or foamed plastics which are sufficiently firm to support the weight of the wearer without fully collapsing and still provide an adequate amount of protection to an opponent. The criteria is, therefore, to select a material for the pads 13 and 14 that will neither be fully collapsed by the weight of the wearer nor give the wearer the sensation that he is bounding or springing about as he moves.

To provide a complete guard for the heel or "kakato" kick, the entire rearward heel portion of the slipper 11 is covered with a pad 17 having an outer cover of soft leather 18. By carrying the pad 17 well around both sides of the heel portion of the slipper 11, the entire heel of the wearer is guarded. It will, of course, be appreciated that this arrangement of the heel pad 17 will be useful in assuring that the slipper 11 will remain snugly fitted on the wearer's heel.

Although the toes are not intentionally employed for kicking an opponent, it is preferred nevertheless to guard the toes of the wearer such as by extending the pad 14, as at 19, upwardly and back over the toe portion of the slipper 11. As a matter of styling as much as anything, the upper toe cap or pad 20 is terminated just about above the base of the wearer's toes.

The toe pad 20 is, of course, covered with a thin layer of leather. Hereagain, as with the pads 13 and 14, it is preferred to use foamed polyvinyl chloride for the toe pad 20.

The power with which the "sokuto" kick (with the edge of the foot) and the "haisoku" kick (with the instep) can be delivered necessitate particular attention to guard the participants from injury. Moreover, either of these kicks can readily result in the kicker being struck on his shin should the opponent shift or attempt to block the kick. Accordingly, in the preferred embodiment of the protective shoe 10, a somewhat T-shaped or L-shaped pad 21 is cooperatively arranged for protecting the instep and outer portions of the wearer's foot as well as his shin for at least a distance of some six to eight inches above the ankle. To accomplish this, the pad 21 includes a fairly-thick padded portion, as at 22, adapted to fit over the instep of the wearer. A laterally-offset extension, as at 23, of the thick pad 21 is cooperatively arranged to overlay the outward side of the wearer's foot between the heel and toe pads 13 and 14. It will, of course, be appreciated from FIGS. 1 and 2 that significant protection is given to the wearer and his opponent by making the central portion of the pad portion 22

of substantial thickness. The marginal edges of the pad portions 22 and 23 are secured, such as by stitching, to the upper 11 thereby leaving the elongated upper portion 24 of the pad 21 extending upwardly along the front of the wearer's shin bone.

To firmly secure the elongated pad 24 to the leg of the wearer, one or more straps, as at 25 and 26, are appropriately arranged to encompass the wearer's leg and be fastened in some suitable manner for maintaining the elongated pad in position. Although either a typical buckle can be used for each of the straps 25 and 26 or the straps can be made of a continuous elastic band, it is preferred to use Velcro gripping-type or hook-and-pile fasteners for the sake of convenience. The entire pad 21 is formed of polyvinyl chloride padding, as at 24, with a soft leather covering 27 secured thereto.

It will be appreciated, therefore, that the elongated pad 24 will guard the shin of the wearer from counter blows by his opponent as well as protect both participants from a misdirected kick. Similarly, since the "haisoku" kick is perhaps the most powerful of the five aforedescribed traditional kicks, the thick pad 22 protecting the wearer's instep will at least minimize any physical injury to an opponent who is struck by such a kick. It should be noted that by providing a fold or crease, as at 28, in the pad 21 between the instep pad 22 and the shin pad 24, the wearer will be better able to bend his foot.

While a particular embodiment of the present invention has been shown and described, it is apparent that changes and modifications may be made without departing from this invention in its broader aspects; and, therefore, the aim in the appended claims is to cover all such changes and modifications as fall within the true spirit and scope of this invention.

What is claimed is:

1. Footwear adapted for protecting an opponent from injury by kicking blows delivered by a wearer of said footwear and comprising: a slipper-like member adapted to be fitted onto the foot of a wearer, said slipper-like member having an upper

portion secured around the marginal edges of a sole portion extending between the heel and toe of said slipper-like member; heel-padding means including a first pad extending around the heel of said upper portion, and a second pad extending under the heel of said sole portion; toe-padding means including a third pad extending over the toe of said upper portion, and a fourth pad extending under the toe of said sole portion; and instep-padding means including a fifth pad extending over the instep portion of said upper portion; said pads being respectively comprised of a pad member of a foamed polyvinyl chloride material, and a cover of a flexible material.

2. The footwear of claim 1 further including a sixth pad secured to said fifth pad and extended upwardly therefrom for protecting the shin of a wearer of said footwear.

3. The footwear of claim 2 wherein said fifth pad is extended downwardly along the outward side of said upper portion to provide padding along the outward side of said sole portion between said heel and toe.

4. The footwear of claim 2 further including means on said sixth pad adapted for retaining said sixth pad on the shin of a wearer of said footwear.

5. The footwear of claim 4 wherein said retaining means include at least one strap having a first portion secured to said sixth pad and a second portion adapted for encompassing the leg of a wearer of said footwear; and fastening means on said sixth pad adapted for releasably securing a third portion of said strap to said sixth pad.

6. The footwear of claim 4 wherein said retaining means include at least one strap having one end secured to said sixth pad, a central portion sized and adapted for encompassing the leg of a wearer of said footwear, and a free end portion having a first hook-and-pile gripping fastener thereon; and a second hook-and-pile fastener on said sixth pad cooperatively arranged for releasable engagement with said first hook-and-pile gripping fastener.

* * * * *

40

45

50

55

60

65

70

75