

US 20130160330A1

## (19) United States

# (12) Patent Application Publication WOJNOWSKI

(10) Pub. No.: US 2013/0160330 A1

(43) **Pub. Date: Jun. 27, 2013** 

#### (54) RENTABLE BOWLING OVERSHOE

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(21) Appl. No.: 13/660,008

(22) Filed: Oct. 25, 2012

#### Related U.S. Application Data

(60) Provisional application No. 61/578,482, filed on Dec. 21, 2011.

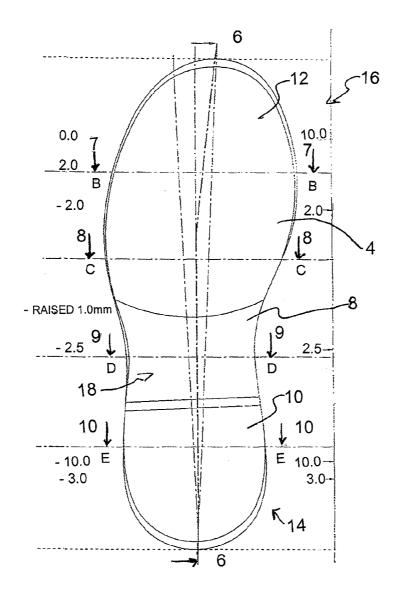
### Publication Classification

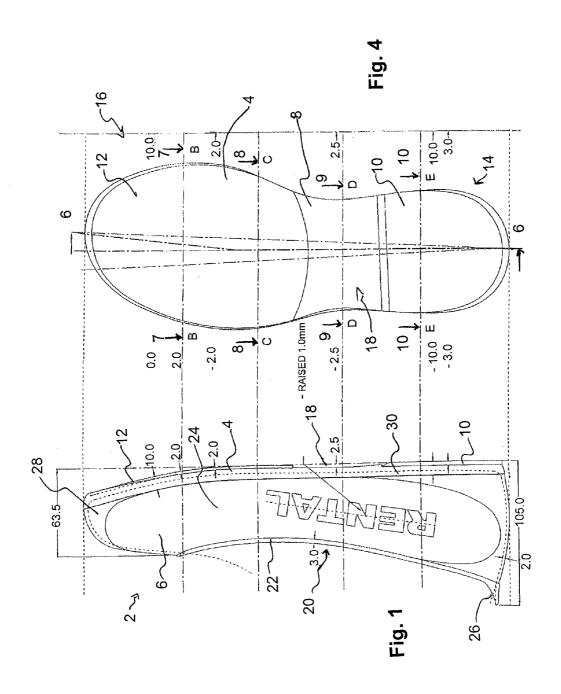
(51) **Int. Cl.**A43B 3/16 (2006.01)

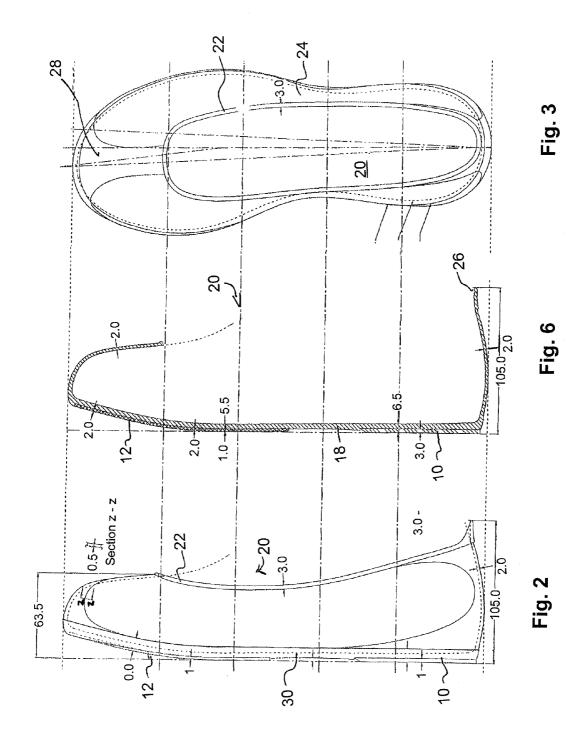
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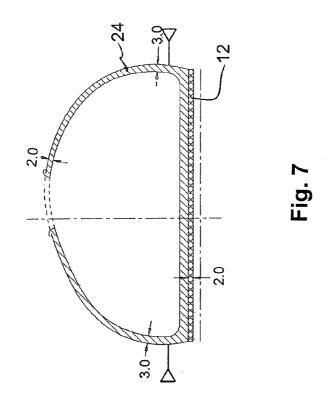
57) ABSTRACT

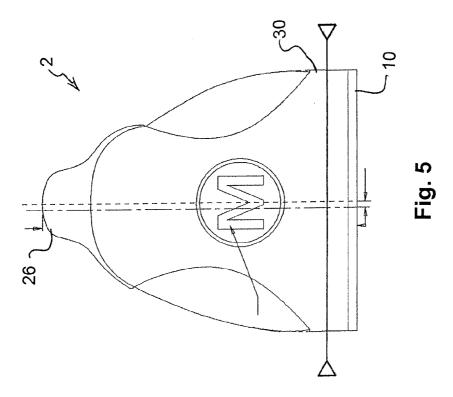
A bowling overshoe for fitting over footwear of a casual bowler. The bowling overshoe comprises a lower sole, an upper portion integral with the lower sole, a gripping section attached to a bottom surface of the lower sole and a slide section attached to the bottom surface of the lower sole. The gripping section, the slide section and the lower sole are each substantially unstretchable while the upper portion of the bowling overshoe is sufficiently stretchable to facilitate the bowling overshoe receiving, via an access opening, and accommodating different size footwear.

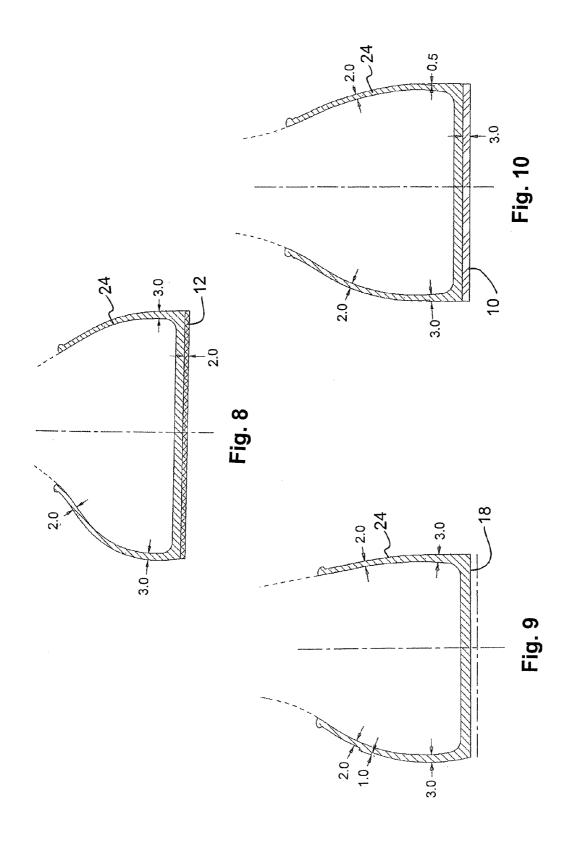












#### RENTABLE BOWLING OVERSHOE

#### FIELD OF THE INVENTION

[0001] The present invention is directed to a bowling overshoe designed to fit over conventional shoes of a bowler for replacing conventional rental shoes required by operators of bowling alleys facilities.

#### BACKGROUND OF THE INVENTION

[0002] As is well known, bowling is an indoor sport that utilizes relatively expensive bowling surfaces that are conventionally formed of hardwood, or possibly a synthetic, surface and typically includes an approach section that is traveled on extensively by bowlers. Due to the expensive nature of such bowling alleys and the desirability to maintain the alleys in an pristine condition, operators of such bowling facilities have established certain rules and/or regulations. For example, substantially all bowling facilities require any bowler, casual or otherwise, utilizing the facility to wear a shoe which will not mark, scratch, mar, damage or otherwise cause excessive or undue wear to the bowling alleys and, more specifically, to the approach sections of the alleys.

[0003] In order to comply with such requirements, many frequent bowlers purchase his/her/their own bowling shoes that are specifically designed for bowling. However, as casual bowlers constitute a significant portion of a bowling facility's clientele, a sufficient supply of rental shoes is required by any operator of a bowling facility in order to meet the demand of the casual bowlers who do not have specialized bowling shoes. Typically, a bowling facility will rent bowling shoes to any bowler who does not have proper shoes for bowling. This, in turn, requires the operator of the bowling facility to maintain a relatively large inventory of these specialized bowling shoes for rental, for both men and women and in various sizes. Accordingly, the casual bowler is almost certain to be forced to wear a pair of bowling shoes which were previously worn by others. Moreover, such bowling shoes may not fit properly or as comfortably as the casual bowler's conventional shoes. Additionally, the bowling facility may have only a limited amount of a particular size of bowling shoes, thus forcing some casual bowlers to wear rental bowling shoes that are either too large or too small for the casual bowler, and this could significantly diminish the amount of enjoyment the casual bowler experiences during bowling, and thus significantly decreasing the chances that the casual bowler will return to the bowling facility for another bowling activity.

[0004] In order to minimize objection from casual bowlers wearing a pair of shoes previously worn by others, as well as minimize the spreading of any foot or other associated diseases, the operator of the bowling facility sanitizes each pair of rental bowling shoes after each use. For example, each pair of shoes is typically sprayed with an antibacterial aerosol spray/antibacterial cleaner in order to sanitize the rental bowling shoes.

[0005] In order to withstand the repeated use of bowling shoes by a variety of casual bowlers, such rental bowling shoes are typically constructed with an all-leather upper as well as a thick outsole. This construction results in a relatively high ownership cost for the operator in order to maintain an adequate supply of rental bowling shoes for the casual bowlers. Additionally, the antibacterial spray, which is applied to these bowling shoes, after each use, tend to cause accelerated wear, tear and/or deterioration of the bowling

shoes, particularly when compared to a pair of bowling shoes which is not subjected to repeated applications of such anti-bacterial aerosol spray/antibacterial cleaner.

[0006] As is known in the prior art, one design of a bowling overshoe, to be worn over a conventional pair of shoes, for rental purposes, is proposed in U.S. Pat. No. 3,609,888. This design relates to a bowling overshoe constructed from a toe cup portion and a heel cup portion, both of which are constructed of leather, and an elastic member interconnects the toe cup and heel cup portions together with one another. The toe and heel cup portions each include one adjustable strap so as to accommodate different shoe sizes. In particular, the heel cup portion includes a single strap arranged to extend over the vamp portion of a user's shoe and an adjustable toe strap which extends over the portion of a user's shoe covering the user's toes.

[0007] Another known design of a bowling overshoe, to be worn over a conventional pair of shoes for rental purposes, is disclosed in U.S. Pat. No. 6,405,459. This design is directed to a bowling overshoe which includes a stretchable upper, a stretchable insole, and an outsole divided into two portions. The overshoe includes an upper, a midsole and an outsole. The upper comprises of a vamp portion, a heel portion and a tensioner while the vamp portion is generally U-shaped having a forward peripheral edge, trailing edges and an inner edge.

[0008] Notwithstanding the above developed alternatives to rental bowling shoes, such alternatives still have associated shortcomings and drawbacks and operators of bowling facilities are still required to maintain a large supply of conventional rental shoes for use by their rental customers.

#### SUMMARY OF THE INVENTION

[0009] Wherefore, it is an object of the present invention to overcome the above mentioned shortcomings and drawbacks associated with the prior art.

[0010] An object of the present invention is to provide a rentable bowling overshoe which minimizes the amount of inventory that the operator of a bowling facility is required to acquire and maintain for rental for youth and adults as well as for both men and women.

[0011] Another object of the present invention is to provide a rentable bowling overshoe in which the lower sole is rigid and comparatively non-stretchable while the lower sole accommodates a gripping strip, in the heel portion, and a glide strip, in the toe portion, of the bowling overshoe.

[0012] Still another object of the invention is to provide a lower sole which can accommodate a variety of different foot widths of the casual bowler with the lower sole typically being designed to accommodate a width of between a conventional C size width to a conventional E size width, for conventional footwear, and with the lower sole preferably having, in an unstressed state, a conventional D size width.

[0013] Yet another object of the present invention is to provide the bowling overshoe with a stretchable upper portion, which facilitates utilization of a variety of different foot shapes and sizes, such that casual bowlers of different shoe sizes, different show widths, different shoe types and different shoe styles may comfortably and securely utilize the same bowling overshoe, thereby minimizing the amount of inventory required by the operator of the bowling facility to meet the normal demands of the bowling clientele.

[0014] Still another object of the present invention is to provide a bowling overshoe that can accommodate at least

two and more preferably three, four or possibly five full shoe size ranges. Accordingly, preferably only five sizes of the bowling overshoe will be necessary in order to cover the full range of rental bowling shoe sizes typically maintained by the operator of the bowling facility. For example, extra small, small, medium, large and extra large overshoe sizes, according to the present invention, should be sufficient to accommodate the full range of bowling shoe sizes for a normal bowling facility.

[0015] A further object of the present invention is to provide bowling overshoe with a side wall which includes a more resilient and stretchable annular band region which extends around the entire perimeter of the bowling overshoe, adjacent the interface between the upper sole and the lower sole, which permits the overshoe to reliably and comfortably accommodate a greater range of different shoe sizes and different shoe types and styles and thereby increase the versatility of the bowling overshoe and thus decrease the amount of inventory required to be carried by the operator of the bowling facility in order to cater to the full range of clientele of the bowling facility.

[0016] Still another object of the present invention is to provide a bowling overshoe which is relatively inexpensive to manufacture and maintain but which still provides a satisfying and rewarding bowling experience for the casual bowler such that the casual bowler is unable to detect any relative movement between the conventional footwear being worn by the bowler and the bowling overshoe.

[0017] A further object of the present invention is to provide a bowling shoe in which a desired logo, emblem, company name, event and/or any other promotional or advertising material can be easily and readily molded, imprinted, embossed or otherwise permanently or temporarily affixed to the bowling overshoe so that such bowling shoes can be handed out by event sponsors, bowling facilities, companies, etc., to facilitate memorializing a special event, special date, a particular milestone, etc., and/or merely as a means for advertising or promoting a desired company, event, etc.

[0018] Another object of the present invention is to provide a rentable bowling shoe which can be readily manufactured by a molding process so that a desired additive, e.g., a fluorescent, a phosphorescent or a persistent luminescent material, for example, may be added prior to the molding process so that the resulting bowling overshoe has the desired characteristic(s), feature(s), properties and/or functionality flowing manufacture thereof, i.e., e.g., the bowling overshoe will be fluorescence, phosphorescence or emit a persistent luminescence.

[0019] A still further object of the present invention is to manufacture each different size of the bowling overshoe, e.g., extra small, small, medium, large and extra large, in a different color so as to readily distinguish between these various sizes and permit the casual bowler to quickly and easily identify which color bowling shoes is the correct and proper size to be worn by that casual bowler.

[0020] The present invention also relates to a bowling overshoe for bowlers to insert their shoed feet within, the bowling overshoe comprising a lower sole, an upper portion, connected to the lower sole, a gripping section attached to a bottom surface of the lower sole, and a slide section attached to the bottom surface of the lower sole.

#### BRIEF DESCRIPTION OF THE DRAWINGS

[0021] The invention will now be described, by way of example, with reference to the accompanying drawings in which:

[0022] FIG. 1 is a diagrammatic right side lateral elevation view of an embodiment of the bowling overshoe according to the invention;

[0023] FIG. 2 is a diagrammatic left side medial elevation view of FIG. 1;

[0024] FIG. 3 is a top plan view of the bowling overshoe of FIG. 1;

[0025] FIG. 4 is a bottom plan view of the bowling overshoe of FIG. 1;

[0026] FIG. 5 is a heel end view of the bowling overshoe of FIG. 1;

[0027] FIG. 6 is a longitudinal cross sectional view of FIG. 4 along section line 6-6 of

[0028] FIG. 4;

[0029] FIG. 7 is a transverse cross sectional view of FIG. 4 along section line 7-7 of FIG. 4;

[0030] FIG. 8 is a transverse cross sectional view of FIG. 4 along section line 8-8 of FIG. 4;

[0031] FIG. 9 is a transverse cross sectional view of FIG. 4 along section line 9-9 of FIG. 4; and

[0032] FIG. 10 is a transverse cross sectional view of FIG. 4 along section line 10-10 of FIG. 4.

#### DETAILED DESCRIPTION OF THE INVENTION

[0033] Turning now to FIGS. 1-10, a brief description concerning the various components of an embodiment of the present invention will now be briefly discussed. As shown in those Figures, the bowling overshoe 2 generally comprises a lower sole 4 and an upper portion 6 fixedly attached to the lower sole 4. As generally shown, a bottom surface 8 of the lower sole 4 is provided with two separate and distinct sections, namely, a gripping section 10 which is preferably spaced from a slide section 12. The gripping section 10 is generally located in the rear heel portion 14 of the bowling overshoe 2 while the slide section 12 is generally located in the front toe portion 16 of the bowling overshoe 2. The bottom surface 8 of the lower sole 4 generally also includes a recessed section 18 which spaces and separates the gripping section 10 from the slide section 12. It is to be appreciated that the recess section 18 could possibly be omitted, so that the gripping section 10 and the slide section 12 directly abut one another (although this embodiment is not shown). A further description concerning the purpose and function of the gripping and the slide sections 10, 12 will be discussed below.

[0034] To facilitate inserting the conventional shoes of the casual bowler within the bowling overshoe 2, generally an elongate oval shaped access opening 20 (see FIG. 3) is provided in the vertically uppermost portion of the upper portion 6. The access opening 20 is sufficiently large to allow the shoe of the casual bowler to be readily passed therethrough and engage with the smooth inwardly facing surface of the upper portion 6 of the bowling overshoe 2, but sufficiently small to prevent inadvertent or unintentional removal of the shoe of the casual bowler therefrom. While the access opening 20 is ideally the only opening in the bowling overshoe 2, it is to be appreciated that one or more other aperture, openings and/or ports may be provided in the bowling overshoe 2 to increase ventilation of the bowling overshoe and/or to augment the stretchability of the upper portion 6. A further description

concerning the purpose and the function of the access opening 20 will be provided below.

[0035] A perimeter reinforcing rib 22 is provided along the edge of and surrounds and defines the access opening 20. The perimeter reinforcing rib 22 reinforces the transverse wall 24 and assists with avoiding inadvertent tears, punctures and/or rips therein and also tends to increase a local elasticity of the bowling overshoe 2. The transverse wall 24 connects a perimeter of the bottom of the lower sole with the access opening 20. The transverse wall 24 comprises the upper portion 6 and a lateral portion of the lower sole 4. An integrated heel tab 26 is attached to an upper part of the heel portion of the upper portion 6 to facilitate inserting footwear through the access opening 20 of the bowling overshoe 2. The heel tab 26 may also be integrated with the upper portion 6, such that the heel tab 26 forms part of the wall defining the access opening 20. [0036] Preferably at least one reinforcement strip 28 is formed on an exterior surface of the bowling overshoe 2 in each of a front toe section and a rear heel section of the bowling overshoe 2. Each reinforcement strip(s) 28 may take the form of an increased thickness or section or reinforced area of the upper portion 6. The reinforcement strip(s) 28 may be arcuate or strait. The shape, size, thickness, number and location of the reinforcement strips are provided so as to increase the resilience of the bowling overshoe 2, while only minimally decreasing the elasticity of the upper portion **6**.

[0037] As shown in FIGS. 1, 2 and 5, for example, a perimeter base reinforcement band 30 is provided along an exterior of the upper portion 6 generally at and along the interface between the lower sole 4 and the upper portion 6. An edge of the perimeter base reinforcement band 30 is generally flush with a lower edge of the lower sole 4, but generally wider than the adjacent area above the perimeter base reinforcement band 30 on exterior of the upper portion 6. The perimeter base reinforcement band 30 generally has a height of between about 2 to about 20 mm and more preferably about 10 mm. The reinforcement band 30 generally extends continuously around the entire perimeter of the bowling overshoe 2.

[0038] The gripping section 10 provides secure footed traction between the bowling overshoe 2 and the bowling alley, or some other surface, to prevent the bowling overshoe 2 from slipping or sliding with respect to that surface with which the gripping section 10 engages. The gripping section 10 thereby allows the casual bowler to feel surefooted when bowling a bowling ball down the bowling lane of the bowling alley.

[0039] The slide section 12, on the other hand, is intended to provide the bowling overshoe 2 with the conventional glide or slide surface upon which the bowling overshoe 2 can easily slide or glide with respect to the surface with which the slide section 12 engages, e.g., the bowling lane of the bowling alley. The slide section 12 thereby allows the casual bowler to raise his/her heel portion 14 and thereby reliably, consistently and gradually glide or slide along the bowling lane during the latter part of a conventional bowling stroke, just as the casual bowler is about to release the bowling ball as well as following release of the bowling ball down the bowling lane of the bowling alley.

[0040] The gripping section 10 typically has a static coefficient of friction against steel of greater than 0.4, and preferably a static coefficient of friction against steel greater than 0.55, and most preferably a static coefficient of friction against steel greater than 0.7. The sliding section, on the other hand, typically has a coefficient of friction against steel of generally less than 0.4 and preferably a static coefficient of

friction against steel of less than 0.3, and most preferably a static coefficient of friction against steel of less than 0.2.

[0041] Both the gripping section 10 as well as the slide section 12 are integrally formed with the bottom surface 8 of the bowling overshoe 2. That is, an upper surface of each of the gripping section 10 and the slide section 12 may be adhesively or otherwise permanently secured to the bottom of the bowling overshoe 2 thereby to form a unitary bottom surface 8 of the bowling overshoe 2, or possibly each of the gripping section 10 and the slide section 12 may be separately manufactured and thereafter placed within a mold and integrally formed with the bottom surface 8 of the bowling overshoe 2 during a conventional molding process of the bowling overshoe 2.

[0042] The gripping section 10 and the sliding section 12 are preferably permanently attached or otherwise affixed to a recessed portion of the lower sole 4. Because of different wear rates, material used, and other factors, the amount that the sections for the gripping section 10 and the sliding section 12 may be different from one another. A surface of the gripping section 10 may be recessed at least 0.75 mm into the bottom surface 8 of the lower sole 4, and more preferably recessed at least 2.0 mm into the bottom surface 8 of the lower sole 4 but not recessed any more than about 4.0 mm into the bottom surface 8 of the lower sole 4. A surface of the slide section 12 may be recessed at least 0.5 mm into the bottom surface 8 of the lower sole 4, and more preferably recess at least 1.0 mm into the bottom surface 8 of the lower sole 4 but not recessed any more than about 3.0 mm into the bottom surface 8 of the lower sole 4.

[0043] An important aspect is that both the gripping section 10 and the slide section 12 are reliably secured or affixed to the bottom surface 8 of the bowling overshoe 2. The gripping section 10 and the slide section 12 are generally, permanently attached to the bottom surface 8 of the lower sole 4. Alternatively, for some applications, the gripping section 10 and/or the slide section 12 may be securely affixed, but removably attached by use of conventional touch fasteners, to the bottom surface 8 of the lower sole 4 thereby allowing the gripping section 10 and/or the slide section 12 to periodically be removed and replaced, e.g., once every three or four months depending upon the amount of usage, in the event that either, or both, the gripping section 10 and/or the slide section 12 become sufficient worn by use.

[0044] The gripping section 10 preferably comprises a conventional material such as rubber while the slide section 12 preferably also comprises a conventional material such as felt. The gripping and the slide sections 10, 12 may be formed at either a single layer of material or from multiple layers of material.

[0045] In order to prevent the gripping section 10 and/or the slide section 12 from becoming inadvertently dislodged or otherwise separated from the bottom surface 8 of the bowling overshoe 2, the lower sole 4 is generally manufactured as a flexible but substantially non-stretchable component, i.e., its total overall axial length does not increase by more than 5%, for example, and more preferably does not increase by more than 2%. That is, the lower sole 4 may generally be folded in half about a mid-plane so that the toe section and the heel section approach one another, and then resiliently allowed to flex back to normal; but the lower sole 4 may generally not be stretchable so that the axial length of the lower sole 4 is not elongateable under normal forces experienced due bowling by a casual bowler.

[0046] On the other hand, the upper portion 6 of the bowling overshoe 2 must be sufficiently stretchable or expandible, when placing the bowling overshoe 2 over conventional footwear, so that a casual bowler may easily stretch and expand the access opening 20 as well as part of the upper portion 6 of the bowling overshoe 2, but not the lower sole 4, and thereby insert his or her conventional footwear through the access opening 20 and inside the bowling overshoe 2 and thereafter allow the natural resiliency of the upper portion 6 of the bowling overshoe 2 to securely retain his or her conventional footwear inside the bowling overshoe 2.

**[0047]** The lower sole  $\bf 4$  is preferably at least twice as resistant to stretching or elongating, when subjected to a lateral elongating force, as the upper portion  $\bf 6$ , more preferably four times as resistant to stretching or elongating when subjected to a lateral elongating force as the upper portion  $\bf 6$ , and most preferably at least six times as resistant to stretching or elongating when subjected to a lateral elongating force as the upper portion  $\bf 6$ .

[0048] One manner of achieving such varying stiffness values, even if the lower sole 4 comprises the same material as the upper portion 6, is by manufacturing the entire lower sole 4 generally thicker than a remainder of the bowling overshoe 2, and thus the lower sole 4 is substantially non-stretchable/non-expandable under normal usage in comparison to the upper portion 6. The reduced stretchable and expandability of the lower sole 4 thereby assists with avoiding inadvertent separation of the gripping section 10 and/or the slide section 12 from the lower sole 4. Further, since both the gripping section 10 and the slide section 12 are substantially non-stretchable/non-expandable under normal usage, both of those sections further contribute to the overall stiffness and rigidity of the lower sole 4 of the bowling overshoe 2.

[0049] Preferably the lower sole 4 (including the thickness of either the gripping section 10 or the slide section 12 which are each generally between about 2 and 3 mm thick) has a total thickness of between about 4 mm and about 8 mm, preferably between about 4.5 mm and about 6 mm. On the other hand, the upper portion 6 preferably has a wall thickness of between 1 and 5 mm and more preferably between 2 and 3 mm.

[0050] The bowling overshoe 2 generally has a solid, continuous transverse wall 24. A shortest vertical distance of the transverse wall 24, from a bottom most edge of the base to the reinforcing rib 22, is between about 35 to 55 mm. Preferably, the transverse wall 24 is a solid side wall which extends continuously around the perimeter of the bowling overshoe 2. [0051] The lower sole 4 and upper portion 6 are both generally integrally molded together during a single molding process. The lower sole 4 and upper portion 6 are generally formed from a resilient and stretchable material such as rubber. The lower sole 4 and upper portion 6 are generally formed of the same material, but may be formed during separate molding processes of separate materials or separate mixtures of materials. The material forming the transverse wall 24 is preferably water proof, but may be constructed of liquid and/or gaseous permeable material, in order to assist with preventing sweat from accumulating on the foot of the casual bowler. Additionally, one or more ports or vent apertures or openings may be provided in the transverse wall 24 in order to increase the ventilation of the bowling overshoe 2.

[0052] Preferably, the upper portion 6 is a single molded layer, with only a single layered wall between the casual bowler's conventional shoes and the external environment.

Preferably, when worn, the access opening 20 is unobstructed without any strap, flap, tie or lacing extending across or over the access opening 20. According to such embodiment, the only retention is provided by the elasticity of the elastic upper portion 6 and the perimeter reinforcing rib 22 so that the casual bowler may quickly and conveniently remove the bowling overshoe 2 when desired following use of the bowling overshoe 2.

[0053] The access opening 20 is generally a single, elongate opening, that adopts a contentious, substantially oval shape in a relaxed state, that is, when nothing is inserted inside the bowling overshoe 2, as generally shown in FIG. 3. The length, measured from front to back, of the single access opening 20 is generally between 60% and 95% of the total overall axial length of the bowling overshoe 2, preferably between 65% and 90% of the total overall axial length of the bowling overshoe 2 from the toe to the heel, more preferably between 70% and 85% of the total overall axial length of the bowling overshoe 2, and most preferably between 75% and 80% of the total overall axial length of the bowling overshoe 2.

[0054] As shown in the top plan view of the bowling overshoe 2 in FIG. 3, the ratio of area defined by the access opening 20 to the total area defined by the bowling overshoe 2 is between 0.35 and 0.75, preferably between 0.4 and 0.675, and most preferably between 0.45 and 0.6.

[0055] The size and location of the access opening 20, in combination with the stretchability and the stiffness of the bowling overshoe 2 assist with the ease and security with which the bowling overshoes 2 may be place over conventional footwear and utilized. One element found to support the function of the bowling overshoe 2 was designing the bowling overshoe 2 such that a ratio of distances from the base of the shoe to the access opening 20—measured at two separate locations—is within certain limits. The two locations preferably measured from are first, the frontmost point of the toe portion 16 of the bowling overshoe 2 (see FIG. 6, for example) and second, the location on the sidewall adjacent to the portion of the bowling overshoe 2 where the width of the separating section 18 is the narrowest (see FIG. 9, for example).

[0056] Specifically, the ratio of (1) a shortest distance along an outer surface of the bowling overshoe 2 from a bottom edge of the lower sole 4 to the access opening 20 measured at a frontmost point of the of the bowling overshoe 2, to (2) a shortest distance measured along an outer surface of the bowling overshoe 2 from a bottom edge of the lower sole 4 to the access opening 20 measured at a location coincident with the narrowest portion of the separating section 18 is between 1.96 and 1.25, preferably between 1.80 and 1.40 and most preferably between 1.77 and 1.45. The ratio of lengths of toe line 6-6 to mid-line 9-9 would also preferably be consistent with these values.

[0057] An important aspect of the present invention is that substantially all of the stretching required by the bowling overshoe 2, so that the bowling overshoe 2 can readily accommodate the shoe size of a variety of different casual bowlers, exclusively occurs in the upper portion 6 of the bowling overshoe 2 while some stretching will occur in the reinforcement band 30. That is, the lower sole 4 remains substantially unexpanded while the upper portion 6 readily expands the most and is reconfigured so as to accommodate the footwear of the casual bowler while the reinforcement band 30 expands more than the lower sole 4 but less than the upper portion 6.

[0058] As shown in FIG. 2, the lower sole 4 of the bowling overshoe 2 is typically designed to accommodate a conventional D width sized shoe of the casual bowler. Such width provides the bowling overshoe 2 with the ability to readily receive accommodate slightly narrower width shoes (e.g., footwear width sizes A, B and C) and also allows the bowling overshoe 2 to expand and accommodate wider width shoes of the casual bowler (e.g., footwear width sizes E, EE, EEE). That is, any necessary stretching required to accommodate wider width shoes of the casual bowler generally primarily occurs within the upper portion 6 and, in particular, around the perimeter base reinforcement band 30, adjacent the outer perimeter where the upper portion 6 is integrally connected with the lower sole 4 by this reinforced section.

[0059] A preferred embodiment of the bowling overshoe 2 can accommodate at least two and more preferably three, four or possibly five full shoe size ranges. Accordingly, preferably only five sizes of the bowling overshoe 2 are required in order to cover the full range of rental bowling shoe sizes typically maintained by the operator of a bowling facility, namely, an extra small bowling overshoe 2, a small bowling overshoe 2, a medium bowling overshoe 2, a large bowling overshoe 2 and an extra large bowling overshoe 2. For example, the lower sole 4 of the extra small bowling overshoe 2 is sized and versatile enough to accommodate shoe sizes from 3½-5½ (including half-sizes) and shoe widths from A to EEE, the small bowling overshoe 2 is sized and versatile enough to accommodate shoe sizes from  $5\frac{1}{2}$ - $7\frac{1}{2}$  (including half-sizes) and shoe widths from A to EEE, the medium bowling overshoe 2 is sized and versatile enough to accommodate shoe sizes from 71/2-91/2 (including half-sizes), the large bowling overshoe 2 is sized and versatile enough to accommodate shoe sizes from 91/2-111/2 (including half-sizes) and shoe widths from A to EEE, and the extra large bowling overshoe 2 is sized and versatile enough to accommodate shoe sizes from 11½-13½ (including half-sizes) and shoe widths from A to EEE.

[0060] In the above description and appended drawings, it is to be appreciated that only the terms "consisting of" and "consisting only of" are to be construed in the limitative sense while of all other terms are to be construed as being openended and given the broadest possible meaning.

[0061] Since certain changes may be made in the above described improved rentable bowling overshoe, without departing from the spirit and scope of the invention herein involved, it is intended that all of the subject matter of the above description or shown in the accompanying drawings shall be interpreted merely as examples illustrating the inventive concept herein and shall not be construed as limiting the invention

Wherefore, I/we claim:

- 1. A bowling overshoe for fitting over footwear of a bowler, the bowling overshoe comprising:
  - a lower sole:
  - an upper portion integral formed with the lower sole and defining an access opening therein;
  - a gripping section and a slide section secured to a bottom surface of the lower sole;
  - wherein the gripping section, the slide section and the lower sole are each substantially unstretchable while the upper portion of the bowling overshoe is sufficient stretchable to facilitate the bowling overshoe receiving and accommodating a variety of different size footwear.

- 2. The bowling overshoe according to claim 1, wherein the slide section and the gripping section are both spaced apart from one another on a bottom surface of the lower sole.
- 3. The bowling overshoe in claim 1, wherein the lower sole is at least twice as resistant to stretching, when subjected to a lateral stretching force, than the upper portion.
- **4**. The bowling overshoe according to claim **1**, wherein the gripping section has a static coefficient of friction against steel of greater than 0.4 while the sliding section has a static coefficient of friction against steel of less than 0.4.
- 5. The bowling overshoe according to claim 1, wherein the gripping section and the slide section are both permanently attached to the bottom surface of the lower sole so as to prevent removal thereof.
- 6. The bowling overshoe according to claim 1, wherein at least one of the gripping section and the slide section is fixedly, but removably, attached to the bottom surface of the lower sole to facilitate replacement of at least one of the gripping section and the slide section once at least one of the gripping section and the slide section becomes sufficiently worn
- 7. The bowling overshoe according to claim 1, wherein the upper portion is sufficiently stretchable so that an extra small bowling overshoe can accommodate footwear sizes from  $3\frac{1}{2}$ - $5\frac{1}{2}$ , a small bowling overshoe can accommodate footwear sizes from  $5\frac{1}{2}$ - $7\frac{1}{2}$ , a medium bowling overshoe can accommodate footwear sizes from  $7\frac{1}{2}$ - $9\frac{1}{2}$ , a large bowling overshoe can accommodate footwear sizes from  $9\frac{1}{2}$ - $11\frac{1}{2}$  and an extra large bowling overshoe can accommodate footwear sizes from  $11\frac{1}{2}$ - $13\frac{1}{2}$ .
- **8**. The bowling overshoe according to claim **1**, wherein the upper portion is sufficiently stretchable so that an extra small bowling overshoe can accommodate footwear sizes from  $3\frac{1}{2}$ - $5\frac{1}{2}$  and shoe widths from A to EEE, a small bowling overshoe can accommodate footwear sizes from  $5\frac{1}{2}$ - $7\frac{1}{2}$  and shoe widths from A to EEE, a medium bowling overshoe can accommodate footwear sizes from  $7\frac{1}{2}$ - $9\frac{1}{2}$  and shoe widths from A to EEE, a large bowling overshoe can accommodate footwear sizes from  $9\frac{1}{2}$ - $1\frac{1}{2}$  and shoe widths from A to EEE and an extra large bowling overshoe can accommodate footwear sizes from  $11\frac{1}{2}$ - $13\frac{1}{2}$  and shoe widths from A to EEE.
- The bowling overshoe according to claim 1, wherein the access opening, in an relaxed state, is generally oval in shape, and
  - the access opening, in the relaxed state, has an axially length which is at least 60% as long as an axially length of the bowling overshoe.
- 10. The bowling overshoe according to claim 9, wherein a ratio of a shortest vertical distance along an outer surface of the bowling overshoe from a lower most edge of the base of the lower sole to the access opening measured at a frontmost location of the bowling overshoe, to a shortest distance measured along an outer surface of the bowling overshoe from a lower most edge of the base of the lower sole to the access opening measured at a location coincident with a narrowest width portion of the bowling overshoe, is between 1.96 and 1.25.
- 11. The bowling overshoe according to claim 1, wherein a perimeter reinforcing sidewall completely circumscribes a perimeter of the bowling overshoe and the perimeter reinforcing sidewall has a vertical height of between 35 to 55 mm.
- 12. The bowling overshoe according to claim 1, wherein the upper portion and the lower sole are both manufactured from the same material.

- 13. The bowling overshoe according to claim 1, wherein the gripping section comprises one of a rubber material while the sliding section comprises one of a felt material.
- **14**. The bowling overshoe according to claim **1**, wherein the bowling overshoe is able to accommodate at least three full shoe size ranges.
- 15. The bowling overshoe according to claim 1, wherein the lower sole is integrally molded with both the gripping section and the sliding section.
- 16. The bowling overshoe according to claim 1, wherein the gripping section is recessed at least 0.75 mm into a bottom surface of the lower sole and the sliding section is recessed at least 0.5 mm into a bottom surface of the lower sole.
- 17. The bowling overshoe according to claim 1, further comprising an integral, arcuate reinforcement strip adjacent an exterior surface of bowling overshoe in each a front and an opposite back area of the bowling overshoe.
- 18. The bowling overshoe according to claim 1, wherein a side wall of the bowling overshoe in the upper portion has a thickness of between 2 and 3 mm.
- **19**. A bowling overshoe for fitting over footwear of a bowler, the bowling overshoe comprising:
  - a lower sole:
  - an upper portion integral formed with the lower sole and defining an access opening therein;
  - a gripping section and a slide section secured to a bottom surface of the lower sole;
  - wherein the gripping section, the slide section and the lower sole are each substantially unstretchable while the upper portion of the bowling overshoe is sufficient stretchable to facilitate the bowling overshoe receiving and accommodating a variety of different size footwear;
  - the upper portion is sufficiently stretchable so that an extra small bowling overshoe can accommodate footwear sizes from 3½-5½ and shoe widths from A to EEE, a small bowling overshoe can accommodate footwear sizes from 5½-7½ and shoe widths from A to EEE, a medium bowling overshoe can accommodate footwear sizes from 7½-9½ and shoe widths from A to EEE, a large bowling overshoe can accommodate footwear sizes from 9½-11½ and shoe widths from A to EEE and an extra large bowling overshoe can accommodate footwear sizes from 11½-13½ and shoe widths from A to EEE and
  - the access opening, in the relaxed state, has an axially length which is at least 60% as long as an axially length of the bowling overshoe.

- 20. A bowling overshoe comprising:
- a lower sole:
- an upper portion, connected to the lower sole;
- a gripping section attached to a bottom surface of the lower sole:
- a slide section attached to the bottom surface of the lower sole.
- the slide section and the gripping section are spaced apart from one another on and permanently attached to the bottom surface of the lower sole;
- the lower sole is at least twice as resistant to deforming when subjected to a lateral force as the upper portion;
- the lower sole and the upper portion are created from the same material together in a unitary die mold;
- the upper portion is substantially stretchable in a lateral direction and the and lower sole is substantially nonstretchable in a lateral direction;
- an access opening for the shoed foot of a bowler to be inserted through, the access opening being, in a relaxed state, at least 60% as long, front to back, as a total exterior length of the bowling overshoe, the access opening adopting an elongate, generally oval shape in a relaxed state;
- a ratio of a shortest distance along an outer surface of the bowling overshoe from a base of the lower sole to the access opening measured at a frontmost location of the bowling overshoe, to a shortest distance along an outer surface of the bowling overshoe from the base of the lower sole to the access opening measured at a location coincident with a narrowest portion of the bowling overshoe, is between 1.96 and 1.50.;
- the gripping section having a static coefficient of friction against steel of greater than **0.4**;
- the sliding section having a static coefficient of friction against steel of less than 0.4
- the lower sole being integrally molded to at least one of the gripping section and the sliding section;
- a face of the gripping section is recessed at least 0.75 mm into a bottom surface of the lower sole;
- a face of the sliding section is recessed at least 0.5 mm into the bottom surface of the lower sole;
- an integral, arcuate reinforcement strip adjacent an exterior surface of the bowling overshoe in each a front and an opposite back area of the bowling overshoe; and
- a side wall of the bowling overshoe in the upper portion having a thickness of between 2 and 3 mm.

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