The present invention discloses a method and system to enable shoes with a removable swappable toe-piece which also provides for a plurality of toe-covers that matingly engage an existing shoe toe cover that may change the contour of the existing toe cover in addition to coloration changes.
FIG. 3
FIG. 11
SHOE WITH SWAPPABLE TOE PIECE

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates generally to shoes and, more specifically, to shoes enabled with a removable swappable toe-piece which also provides for a plurality of toe-covers for matingly engaging an existing shoe toe cover that may change the contour of the existing toe cover in addition to coloration changes.

2. Description of the Prior Art

There are other reconfigurables designed for shoes. Typical of these is U.S. Pat. No. 900,499 issued to Eckhard, Jr. on Oct. 6, 1908.

Another patent was issued to Nyhagen on May 4, 1937 as U.S. Pat. No. 2,079,331. Yet another U.S. Pat. No. 2,292,770 was issued to Platkin on Aug. 11, 1942 and still yet another was issued on Jun. 8, 1982 to Samuels as U.S. Pat. No. 4,333,248.

Another patent was issued to Lin on Apr. 27, 1990 as U.S. Pat. No. 5,896,684. Yet another U.S. Pat. No. 5,996,258 was issued to Simmons on Dec. 7, 1999. Another was issued to Lin on Aug. 13, 2002 as U.S. Pat. No. 6,430,846 and still yet another was issued on Apr. 5, 2005 to Delgatty as U.S. Pat. No. 6,874,256.


U.S. Pat. No. 900,499
Inventor: August Eckhard, Jr.
Issued: Oct. 6, 1908

A shoe protector having a body portion, a strap adapted to fit around the rear of the shoe, a short angular metallic tip having one part thereof embedded within the body portion and the other part extending inward and adapted to engage under the sole of the shoe, and a narrow integral part extending transversely of the strap and adapted to engage under the instep of the shoe and to provide an open space between the tip and said transverse part for the sole.

U.S. Pat. No. 2,079,331
Inventor: Barney R. Nyhagen
Issued: May 4, 1937

A foldable sandal type overshoe constructed of waterproof elastic material including two identically shaped portions disposed parallel to and in flat contact with each other when folded, and contoured to provide when unfolded a covering for the sole and forepart of the upper, a pair of angularly related loops, one extending rearwardly and adapted to fit around the heel portion of the upper and the other extending upwardly to fit over the instep, and relatively thick roughened tread areas on the sole covering part of each of said areas having the adjacent inner edges thereof spaced apart and located on opposite sides of a relatively thinner linear portion constituting a fold line.

U.S. Pat. No. 2,292,770
Inventor: Daniel Platkin
Issued: Aug. 11, 1942

A reversible shoe slip cover comprising: a covering member of sheet material decoratively finished on both sides and a flexible sole member secured together with a flush joint to form a protective pocket adapted to fit over the toe portion of a shoe, and a strap secured to said pocket and adapted to embrace the heel portion of said shoe to retain the said protective pocket on said shoe.

U.S. Pat. No. 4,333,248
Inventor: Samuel Samuels
Issued: Jun. 8, 1982

An improved protective shoe. The shoe may be an industrial or athletic shoe. A protective cover overlies the toe and instep and is at least partially removable from the shoe itself. The protective cover has an outer flexible sheet and an inner energy-absorbing layer. A particular improvement lies in providing a flap overlying the shoeelaes, with a pair of openable flap closure means on each side of the flap so as to provide an unbroken cushioned surface over the very vulnerable high point of the shoe.

U.S. Pat. No. 5,896,684
Inventor: Ghing Yi Lin
Issued: Apr. 27, 1999

A detachable toe strap and ankle strap mounting arrangement for a simple shoe, the arrangement includes at least one pairs of locating members, each locating member having a plug hole and a serrated constraint tongue in the plug hole, at least one pair of mounting strips detachably connected to the locating members, each mounting strip having a transverse insertion slot at the top, and at least one downwardly extended, serrated plug strip at the bottom for plugging into the plug hole on one locating member for engagement with the corresponding serrated constraint tongue, and at least one strap fastened to the at least one pair of mounting strips for securing at least one part of the user’s foot to the sole of the shoe, each strap having two ends respectively inserted through the insertion slots on one pair of mounting strips and fixedly secured thereto by stitches, and a pin kept in a hole thereon, the pin being used for insertion into the plug hole on one locating member to disengage the respective serrated plug strip from the respective serrated constraint tongue.

U.S. Pat. No. 5,996,258
Inventor: Randy Lamont Simmons
Issued: Dec. 7, 1999

A flexible shoe protector for shielding shoes from scratches and abrasions having an upper member that extends over a front top portion of a shoe, a lower member extending below a front sole portion of the shoe and extending rearwardly toward the heel of the shoe, and an intermediate flexible portion connected between the upper member and the lower member. The intermediate flexible portion is capable of
stretching to accommodate a variety of sizes and shapes of different shoes. A flexible strap member is attached to a rearward portion of the intermediate flexible portion so that the strap member is used to stretch about a rearward portion of the shoe above the heel, for securing of the shoe cover to the shoe. The flexible strap and the intermediate portion are made from a material having elastic qualities, such as Span-dex®. A rubber portion is attached to the bottom of the lower member to provide traction when a wearer is wearing the shoe protector. Optional features include the addition of reflecting material or glow-in-the-dark material to the shoe protector, for increased visibility in darkness.

U.S. Pat. No. 6,430,846
Inventor: Gisting Yi Lin
Issued: Aug. 13, 2002

[0014] A shoe with a detachable vamp. The shoe includes a sole having an anchor seats encased by integral injection forming processes. Each anchor seat has a wedge slot with tow teethed elastic flaps located therein and a connecting flap bridging between the two elastic flaps. The anchor seat has a side wall adjacent to the wedge slot with a round opening formed on the side wall. The opening engages with a push-button through a strut which engages with an annular tenon at one end. Latch members are provided to stitch to a vamp and to engage with the anchor seats. Each latch member has two latch blades extended downwards and has teeth formed on one side corresponding to the teethed elastic flap.

U.S. Pat. No. 6,874,256
Inventor: Grant Verdun Delgatty
Issued: Apr. 5, 2005

[0015] A shoe construction including a removable vamp. In an implementation, the shoe includes an outsole, an upper attached to the outsole, the upper including an elastic material that spans a throat area, a removable vamp, a throat fastening means, and a vamp fastening means. The throat fastening means and the vamp fastening means provide a two-point connection that stabilizes the removable vamp so that it remains in the correct position during wear of the shoe. A customizing kit may be provided to permit a consumer to customize the vamp, for example, by applying a heat transfer image to the vamp.

U.S. Pat. No. 6,981,340
Inventor: Adrian L. Evans
Issued: Jan. 3, 2006

[0016] A device for protecting footwear of a motorcycle rider comprises a sole of a water impermeable material, an upper of bodily flexible material and an adjustable strap for securing the device to footwear of the rider. The device is typically worn on the left foot of the rider because motorcycle transmissions are shifted by the left foot, leaving a characteristic wear pattern on the left shoe or boot of the rider. The upper allows substantial air movement around the rider’s footwear and may be partially or wholly insulated with a foam layer in the upper. Some embodiments provide greater air circulation and less insulation. Two types of adjustable straps are shown.

U.S. Pat. No. 7,028,420
Inventor: Raymond F. Tonkel
Issued: Apr. 18, 2006

[0017] A shoe, sandal, beach shoe, or other form of footwear, integrates a slot within its sole structure, as this footwear is assembled, and within the slot is a continuous band, that may form part of the shoe vamp, strapping, or related structure, and which vamp or band may be turned, for displaying different coloration or designs, texture, or means for providing support, massaging, or stimulation, of the foot, as through interiorly protruding tips, or to form and dispose apertures that furnish ventilation and aeration to the foot thereunder, all in order to change the aesthetics of the footwear at the desire of the user. In addition, to add to the structural integrity of the constructed shoes, a part of the vamp or its strapping, may extend upwardly, and have a loop formed therein, or even loop back on itself, and which may embrace the upper part of the changeable vamp, to facilitate its retention, and structural configuration, when the vamp is turned, to vary its appearance.

European Patent Application Number EP 1 749 454
Inventor: Chris Towns
Published: Aug. 2, 2006

[0018] There is provided an article of footwear (10), such as a shoe, sandal or boot, having an upper (12), a sole (11) and a primary fastening means (13) such as laces. The article of footwear also has an additional flexure system comprising an elasticated cord (14) which is held relative to a series of interlocking tabs (17,19) formed alternately on adjacent first and second sections (15,16) of the upper (12). This construction enables the two sections (15,16) to flex relative to each other.

International Patent Application Number WO
2008/007403
Inventor: David Paolo Spinelli
Published: Jan. 17, 2008

[0019] Shoe with detachable sole and vamp, in which: the sole (1) has an upper surface (2) on which several tubular elements (4) are applied spaced from each other by a preset value; the vamp (7) has a lower surface (6) on which there are applied several tubular elements (8) spaced from each other by a preset value; the vamp (7) can be positioned onto the sole (1) by positioning said lower surface (6) of the vamp (7) onto the upper surface (2) of the sole (1) with the insertion of the tubular elements (8) of the vamp (7) between the tubular elements (4) of the sole (1); and the vamp (7) is detachably anchored to the sole (1) by inserting a wire (9) through the said tubular elements of the sole and the vamp after positioning of the vamp onto the sole. Said tubular elements of the sole (1) are placed according an open annular path, with two tubular elements (40, 41) disposed in correspondence of a respective end of the open annular path and communicating with the outside of the sole (1).
While these shoes may be suitable for the purposes for which they were designed, they would not be as suitable for the purposes of the present invention, as hereinafter described.

SUMMARY OF THE PRESENT INVENTION

A primary object of the present invention is to provide a plurality of toe-covers that can be selectively applied to a shoe to change its appearance.

Another object of the present invention is to provide a plurality of toe-covers that can be selectively applied to a shoe to change its contour.

Yet another object of the present invention is to provide toe-covers that matingly engage the shoe sole.

Still yet another object of the present invention is to provide toe-covers having a plurality of latching elements depending from each toe-cover having a corresponding shoe sole latching member.

Another object of the present invention is to provide a shoe having a removable toe-cover portion that is selectively replaceable with a plurality of provided toe-covers.

Yet another object of the present invention is to provide shoe toe-covers for existing shoes whereby the appearance of the shoe can be changed by covering an existing toe cover with a desired toe-cover.

Additional objects of the present invention will appear as the description proceeds.

The present invention overcomes the shortcomings of the prior art by providing shoes enabled with a removable swappable toe-piece which also provides for a plurality of toe-covers for matingly engaging an existing shoe toe cover that may change the contour of the existing toe cover in addition to coloration changes.

The foregoing and other objects and advantages will appear from the description to follow. In the description reference is made to the accompanying drawings, which forms a part hereof, and in which is shown by way of illustration specific embodiments in which the invention may be practiced. These embodiments will be described in sufficient detail to enable those skilled in the art to practice the invention, and it is to be understood that other embodiments may be utilized and that structural changes may be made without departing from the scope of the invention. In the accompanying drawings, like reference characters designate the same or similar parts throughout the several views.

The following detailed description is, therefore, not to be taken in a limiting sense, and the scope of the present invention is best defined by the appended claims.

BRIEF DESCRIPTION OF THE DRAWING FIGURES

FIG. 1 is an illustrative view of the present invention in use.

FIG. 2 is an illustrative view of the present invention.

FIG. 3 is an illustrative view of the present invention.

FIG. 4 is an assembled illustrative view of the present invention.

FIG. 5 is an assembled illustrative view of the present invention.

FIG. 6 is a top view of the present invention.

FIG. 7 is a detailed view of the present invention.

FIG. 8 is an exploded sectional view of the present invention.

FIG. 9 is an assembled sectional view of the present invention.

FIG. 10 is an illustrative view of the present invention.

FIG. 11 is an illustrative view of an alternate of the present invention.

DESCRIPTION OF THE REFERENCED NUMERALS

Turning now descriptively to the drawings, in which similar reference characters denote similar elements throughout the several views, the Figures illustrate the method of constructing a catalog of the resources accessible through a network of the present invention. With regard to the reference numerals used, the following numbering is used throughout the various drawing figures.

10 shoe with swappable toe piece of the present invention

12 user

14 foot

16 sole

18 bottom of sole

20 top of sole

22 bore of sole

24 lip of bore

26 upper interior

28 upper exterior

30 upper channel

32 toe piece

34 toe piece adjacent fasteners

36 toe piece lip

38 toe piece rail

40 toe piece base-positioned fastener

42 toe-piece post

44 toe piece post stub

46 toe piece receptacle

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

The following discussion describes in detail one embodiment of the invention (and several variations of that embodiment). This discussion should not be construed, however, as limiting the invention to those particular embodiments, practitioners skilled in the art will recognize numerous other embodiments as well. For definition of the complete scope of the invention, the reader is directed to appended claims.

Referring to FIG. 1 shown is an illustrative view of the present invention in use. The present invention 10 is a shoe having a swappable toe piece 32 attachable to sole 16 and upper 26, 28 with the sole 16 having a bottom side 18 and top side 20. Within the body of the sole 16 is aperture 22 forming a bore having a lip 24 therein for retaining toe piece fastener 40. Toe piece 32 has adjacent fasteners 34 for securing the toe piece to sole 16 and upper 26, 28. Extending from the base of the toe piece is fastener 40 comprising post 42 and stub 44 for lockingly engaging the toe piece 32 to sole 16. The toe piece...
also provides for an adjacent fastener 34 comprising toe piece 32 having toe piece lip 36 incorporating rail 38 that matingly engages with upper channel 30 securing toe piece 32 to both the sole 16 and upper 26,28 thereby providing user 12 with means for varying the type of shoe worn on feet 14.

[0065] Referring to FIG. 2, shown is an illustrative view of the present invention. Shown is the present invention 10 having a plurality of toe pieces 32 varying in color comprising lip 36 and rail 38 with adjacent fasteners 40 mateable to their respective corresponding sole apertures 22, 24 and upper channel 30.

[0066] Referring to FIG. 3, shown is an illustrative view of the present invention. Shown is the present invention 10 having a plurality of toe pieces 32 varying in surface area comprising lip 36 and rail 38 with adjacent fasteners 40 mateable to their respective corresponding sole apertures 22, 24 and upper channel 30.

[0067] Referring to FIG. 4, shown is an assembled illustrative view of the present invention. The present invention 10 is a shoe having a swappable toe piece 32 attachable to sole 16 and upper 26,28 with the sole 16 having a bottom side 18 and top side 20. Within the body of the sole 16 is aperture 22 forming a bore having a lip 24 therein for retaining toe piece fastener 40. Toe piece 32 has adjacent fasteners 34 for securing the toe piece to sole 16 and upper 26, 28. Extending from the base of the toe piece is fastener 40 comprising post 42 and nub 44 for lockingly engaging the toe piece 32 to sole 16. The toe piece also provides for an adjacent fastener 34 comprising toe piece 32 having toe piece lip 36 incorporating rail 38 that matingly engages with upper channel 30 securing toe piece 32 to both the sole 16 and upper 26,28 thereby providing user 12 with means for varying the type of shoe worn on feet 14.

[0068] Referring to FIG. 5, shown is a detached toe piece of the present invention. The toe piece 32 attaches to sole 16 and upper 26,28 with the body of the sole 16 having aperture 22 forming a bore having a lip 24 therein for retaining toe piece fastener 40. Toe piece 32 has adjacent fasteners 34 for securing the toe piece to sole 16 and upper 26, 28. Extending from the base of the toe piece is fastener 40 comprising post 42 and nub 44 for lockingly engaging the toe piece 32 to sole 16. The toe piece also provides for an adjacent fastener 34 comprising toe piece 32 having toe piece lip 36 incorporating rail 38 that matingly engages with upper channel 30 securing toe piece 32 to both the sole 16 and upper 26,28 thereby providing user 12 with means for varying the type of shoe worn on feet 14.

[0069] Referring to FIG. 6, shown is a top view of the present invention. Illustrated is the shoe 10 with toe piece 32 removed. Shown is shoe 10 having sole 16 having top side 20 with aperture 22 and lip 24 for retaining toe piece fasteners therein. Also shown is shoe 10 having upper 26,28 incorporating upper channel 30 for retaining the toe piece adjacent fastener.

[0070] Referring to FIG. 7, shown is a detailed view of the present invention. Illustrated is toe piece 32 having lip 36 incorporating rail 38 mateable with upper 26,28 channel 30. Also shown is sole 16 having bottom 18 and top 20 with aperture 22 and lip 24 for securing the adjacent toe piece fastener thereto.

[0071] Referring to FIG. 8, shown is an exploded sectional view of the present invention. Illustrated is toe piece 32 having base-positioned fastener 40 forming one of the toe piece fasteners 34 wherein fastener 40 comprises post 42 and transverse nub 44 that matingly engages toe piece 32 with sole 16 having bottom 18 and top 20 having aperture 22 and lip 24 for securing the toe piece to the shoe.

[0072] Referring to FIG. 9, shown is an attached sectional view of the present invention. Illustrated is toe piece 32 having base-positioned fastener 40 forming one of the toe piece fasteners 34 wherein fastener 40 comprises post 42 and transverse nub 44 that matingly engages toe piece 32 with sole 16 having bottom 18 and top 20 having aperture 22 and lip 24 for securing the toe piece to the shoe.

[0073] Referring to FIG. 10, shown is an illustrative view of the present invention in use. The present invention 10 is a shoe having a swappable toe piece 32 attachable to sole 16 and upper 26,28 with the sole 16 having a bottom side 18 and top side 20. Within the body of the sole 16 is aperture 22 forming a bore having a lip 24 therein for retaining toe piece fastener 40. Toe piece 32 has adjacent fasteners 34 for securing the toe piece to sole 16 and upper 26, 28. Extending from the base of the toe piece is fastener 40 comprising post 42 and nub 44 for lockingly engaging the toe piece 32 to sole 16. The toe piece also provides for an adjacent fastener 34 comprising toe piece 32 having toe piece lip 36 incorporating rail 38 that matingly engages with upper channel 30 securing toe piece 32 to both the sole 16 and upper 26,28 thereby providing user 12 with means for varying the type of shoe worn on feet 14.

[0074] Referring to FIG. 11, shown is an illustrative view of an alternate of the present invention. Shown is an alternate of the present invention 10 having a non-removable toe piece forming an integral with sole 16 and upper 26, 28. It is envisioned that toe piece 32 may have a single fastening element whereby toe piece 32 covers the existing shoe toe piece.

[0075] It will be understood that each of the elements described above, or two or more together may also find a useful application in other types of devices differing from the type described above.

[0076] While certain novel features of this invention have been shown and described and are pointed out in the annexed claims, it is not intended to be limited to the details above, since it will be understood that various omissions, modifications, substitutions and changes in the forms and details of the device illustrated and in its operation can be made by those skilled in the art without departing in any way from the spirit of the present invention.

[0077] Without further analysis, the foregoing will so fully reveal the gist of the present invention that others can, by applying current knowledge, readily adapt it for various applications without omitting features that, from the standpoint of prior art, fairly constitute essential characteristics of the generic or specific aspects of this invention.

What is claimed is new and desired to be protected by Letters Patent is set forth in the appended claims:

1. A method and apparatus providing shoes having swappable toe pieces; the method comprising the steps of:
   a) providing a pair of shoes having a sole with an upper attached thereto having a removable toe piece;
   b) removing the toe pieces from said shoes;
   c) providing an additional pair of toe pieces for said shoes;
   d) providing adjacent fasteners within said shoes comprising a sole fastener and an upper fastener;
   e) providing corresponding mating fasteners within said additional toe pieces; and
   f) attaching said additional toe pieces to said respective corresponding shoe fasteners.
2. The method as recited in claim 1, wherein the footprint of each additional pair of toe pieces is substantially similar to the removed toe pieces with a dissimilar surface area.

3. The method as recited in claim 2, further providing a plurality of attachable toe-pieces whereby a user selectively changes the type of toe pieces attached to said shoes.

4. The method as recited in claim 3, further providing storage means for organizing said plurality of additional toe pieces.

5. The apparatus providing shoes with swappable toe pieces comprising:
   a) a pair of shoes having a sole with an upper attached thereto having removable toe pieces;
   b) having an additional pair of toe pieces for said shoes;
   c) the shoes having adjacent fasteners securing said removable toe pieces to said shoes;
   d) the shoes having at least one sole fastener for receiving a base positioned toe piece fastener therein; and
   e) the shoes having at least one upper fastener for receiving a toe piece edge positioned fastener thereto.

6. The apparatus of claim 5, wherein said shoe having a sole and upper has an open vamp whereby the toe piece fastener engages the vamp of said shoe.

7. The apparatus of claim 5, wherein said shoe having a sole and upper has an open vamp whereby the toe piece fastener forms the vamp of said shoe.

8. The apparatus of claim 5, wherein said sole fastener is a cavity extending partially into said sole.

9. The apparatus of claim 8, wherein said cavity is a bore with a lip for latching to a toe piece fastener.

10. The apparatus of claim 9, wherein said toe piece base-positioned fastener is a post with a transverse nub extending therefrom.

11. The apparatus of claim 10 wherein the toe piece nub resides under said sole bore lip when said toe piece is matingly engaged to said sole fastener.

12. The apparatus of claim 11, wherein said toe piece has a plurality of base-positioned fasteners with a plurality of correspondingly positioned sole bore fasteners.

13. The apparatus of claim 11, wherein the adjacent shoe fastener is a channel for receiving the lip of the toe piece.

14. The apparatus of claim 11, wherein the adjacent shoe fastener is mating members of hook and loop material positioned on the respective shoe and toe piece portions.

15. The apparatus of claim 11, wherein the adjacent shoe fastener is mating magnetic members positioned on the respective shoe and toe piece portions.

16. The apparatus of claim 11, wherein the adjacent shoe fastener is mating magnetic members positioned on the respective shoe and toe piece portions.

17. The apparatus of claim 11, further comprising a receptacle for storing said plurality of toe pieces.

18. The apparatus of claim 11, wherein said plurality of toe pieces are of various shapes.

19. The apparatus of claim 11, wherein said plurality of toe pieces are of various colors and patterns.

20. The apparatus of claim 11, further comprising a toe pieces that can be placed over an existing toe piece.

21. The apparatus of claim 20, further comprising a bonding element for holding the superjacent toe piece to said shoe.

* * * * *