ATTACHABLE SHOE SOLE PROTECTOR

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 ABSTRACT

An attachable shoe sole protector is provided as a means of increasing the longevity of a shoe’s sole while providing increased structural stability and traction to the attached shoe. The present invention comprises a shoe mount, a toe assembly, and a heel assembly. The shoe mount is provided as the portion of the present invention that peripherally attaches to the existing shoe. The toe assembly is a structural element that utilizes a rigid construction in order to reinforce the shoe mount’s engagement proximal to the existing shoe’s toe section. The heel assembly is a structural element that utilizes a rigid construction in order to reinforce the shoe mount’s engagement proximal to the existing shoe’s heel section. The toe assembly and the heel assembly additionally include trenched portions that improve the traction of the existing shoe, enabling the wearer to use various types of shoes for a plurality of unintended activities.
ATTACHABLE SHOE SOLE PROTECTOR

FIELD OF THE INVENTION

[0001] The present invention generally relates to a footwear accessory, more specifically, the present invention is a shoe sole protector that attaches to an existing shoe in order to increases the longevity of said shoe’s tread as well as improve the traction of said shoe allowing to perform a plurality of activities.

BACKGROUND OF THE INVENTION

[0002] It is well known that most footwear items, specifically shoes, include a bottom section commonly referred to as a sole. Soles are the ground contacting feature of a shoe that provides structural support and traction to the worn shoe. Soles offer a shoe with a semi rigid plate that serves as a mounting point for the upper material while reinforcing the lower portion of the shoe. The reinforced construction allows the sole to absorb the impact felt by stepping on ground imperfections, decreasing localized pressure points to the user’s feet while walking. Additionally, the soles include treads that significantly increase a shoe’s traction. Although most modern shoe soles offer a durable construction, the materials utilized such as natural rubber, polyurethane, and polyvinyl chloride, still wear down over time resulting in decreased structural support and traction. While many prior art, such as overshoes, have attempted to address this issue, they majority create several additional problems.

[0003] Overshoes are replacement soles for a shoe that increase the thickness of a sole and change the tread pattern. These replacement soles fit over the original soles and are held in place through the use of an upper retaining mechanism. Commonly, these replacement soles are constructed of a single material and are designed to fit a plurality of shoe sizes and types. Although these replacement soles change the tread pattern and offer a thicker sole to an existing shoe, many of these replacement soles lack the means of securely fastening to said existing shoes. By lacking a means of adequately securing the replacement sole to the shoe, the replacement soles are unable to prevent unwanted movement with the existing shoe, resulting in a sudden loss of stability to the wearer during said unwanted movement.

[0004] It is therefore the object of the present invention to provide an attachable shoe sole protector that is able to securely engage to an existing shoe, offering improved traction and structural support while eliminating unwanted movement between said existing shoe and the present invention. The present invention comprises a shoe mount, a toe assembly, and a heel assembly. The shoe mount is provided as the portion of the present invention that peripherally attaches to the existing shoe. The toe assembly and the heel assembly are structural elements that utilize a rigid construction in order to reinforce the shoe mount’s engagement with the existing shoe. The toe assembly and the heel assembly additionally include treaded portions that improve the traction of the existing shoe, enabling the wearer to use various types of shoes for a plurality of unintended activities. Through the arrangement of the aforementioned components the present invention is able to improve upon the limitations of the existing prior art.

BRIEF DESCRIPTIONS OF THE DRAWINGS

[0005] FIG. 1 is a left side perspective view displaying the attachable shoe sole protector with a plurality of laterally positioned decorative mounts as per the current embodiment of the present invention.

[0006] FIG. 2 is a right side perspective view displaying the attachable shoe sole protector with the plurality of laterally positioned decorative mounts as per the current embodiment of the present invention.

[0007] FIG. 3 is a lower perspective view displaying the lower portion of the attachable shoe sole protector with the plurality of laterally positioned decorative mounts as per the current embodiment of the present invention.

[0008] FIG. 4 is a top down elevational view displaying the attachable shoe sole protector with the plurality of laterally positioned decorative mounts as per the current embodiment of the present invention.

[0009] FIG. 5 is a cross sectional view displaying the attachable shoe sole protector with the plurality of laterally positioned decorative mounts as per the current embodiment of the present invention.

[0010] FIG. 6 is a left elevational view displaying the attachable shoe sole protector with lateral printing surfaces attached to the existing shoe as per the current embodiment of the present invention.

[0011] FIG. 7 is a cross sectional view displaying the attachable shoe sole protector’s engagement with the existing shoe as per the current embodiment of the present invention.

DETAIL DESCRIPTIONS OF THE INVENTION

[0012] All illustrations of the drawings are for the purpose of describing selected versions of the present invention and are not intended to limit the scope of the present invention.

[0013] Referencing FIG. 1 and FIG. 2, the present invention is an attachable shoe sole protector that increases the longevity of a shoe’s sole while increasing the structural stability and the traction of said shoe. In the current embodiment of the present invention, the attachable shoe sole protector comprises a shoe mount 1, a toe assembly 10, and a heel assembly 13. The shoe mount 1 is the upper portion of the present invention that attaches to an existing shoe 18. The shoe mount 1 securely houses an attached existing shoe 18 enabling the toe assembly 10 and the heel assembly 13 to function as replacement soles. The toe assembly 10 is a frontally positioned assembly that provides structural support to the shoe mount 1 and serves as the replacement sole for the frontal portion of the attached existing shoe 18. The heel assembly 13 is a rearwardly positioned assembly that provides structural support to the shoe mount 1 and serves as the replacement sole for the rearward portion of the attached existing shoe 18. In the current embodiment of the present invention, the shoe mount 1 is positioned between the heel assembly 13 and the toe assembly 10. The toe assembly 10 is found coincident with at least two frontally positioned surfaces of the shoe mount 1, wherein the at least two frontally positioned surfaces of the shoe mount 1 would correspond to lateral and lower surfaces. The heel assembly 13 is found coincident with at least two rearwardly positioned surfaces of the shoe mount 1, wherein the at least two rearwardly positioned surfaces of the shoe mount 1 would correspond to lateral and lower surfaces.

[0014] Referencing FIG. 1, FIG. 2, and FIG. 4, the shoe mount 1 is the upper portion of the attachable shoe sole
protector that houses the attached existing shoe 18. The shoe mount 1 is found engaged between the toe assembly 10 and the heel assembly 13. In the current embodiment of the present invention, the shoe mount 1 comprises a shoe mount opening 2, an exterior surface 3, an interior surface 4, and a rigid lower section 6. The shoe mount opening 2 is the upper portion of the shoe mount 1 that is traversed by the existing shoe 18 prior to being attached. The shoe mount opening 2 facilitates access to the interior surface 4 of the shoe mount 1. The shoe mount opening 2 is found coincident with the exterior surface 3 and the interior surface 4. The shoe mount opening 2 is found parallel with the rigid lower section 6. The exterior surface 3 is the most visible portion of the shoe mount 1 that engages the toe assembly 10 and the heel assembly 13. The exterior surface 3 is perimetrically positioned on the lateral portion of the shoe mount 1. The exterior surface 3 is engaged to the toe assembly 10 resulting in the exterior surface 3 being positioned between the toe assembly 10 and the interior surface 4. Additionally, the exterior surface 3 is engaged to the heel assembly 13 resulting in the exterior surface 3 being positioned between the heel assembly 13 and the interior surface 4. The rigid lower section 6 is the lower portion of the shoe mount 1 that is coupled to the toe assembly 10 and the heel assembly 13. The rigid lower section 6 is found parallel with the shoe mount opening 2 below the positioning of the interior surface 4 and the exterior surface 3. The rigid lower section 6 is engaged to the toe assembly 10 resulting in the rigid lower section 6 being positioned between the toe assembly 10 and the interior surface 4. Additionally, the rigid lower section 6 is engaged to the heel assembly 13 resulting in the rigid lower section 6 being positioned between the heel assembly 13 and the interior surface 4. The interior surface 4 is bordered by the exterior surface 3 and the rigid lower section 6. The interior surface 4 forms an internal perimeter within the shoe mount 1. In the current embodiment of the present invention, the interior surface 4 comprises an adhesive material 5. Referencing FIG. 7, the adhesive material 5 is provided as a means of securing the existing shoe 18 to the shoe mount 1. The adhesive material 5 is layered on top of the interior surface 4. During use the adhesive material 5 binds with the existing shoe 18 positioned within the shoe mount 1. The engagement between the existing shoe 18 and the shoe mount 1 results in the adhesive material 5 being positioned between the interior surface 4 and the peripheral surface of the attached existing shoe 18. In the current embodiment of the present invention, the shoe mount 1 comprises shaped contours 7. The shaped contours 7 are arcuate features designed to complement shaped features of existing shoe 18s. The shaped contours 7 additionally function as a means of sectioning regions of the shoe mount 1, wherein the shoe mount 1 is longitudinally divided into a toe section 8 and a heel section 9 by the positioning of the shaped contours 7. The shaped contours 7 create a distinct separation between the toe section 8 and the heel section 9. This division created by the shaped contours 7 provides the toe section 8 and the heel section 9 with a particular area that complements the positioning of the toe assembly 10 and the heel assembly 13, respectively. This section specific division results in the toe assembly 10 being coincident with the toe section 8, and the heel assembly 13 being coincident with the heel section 9.

RE 0015] Referencing FIG. 3 and FIG. 4, the toe assembly 10 is a frontally positioned assembly that provides structural support to the shoe mount 1 and serves as the replacement sole for the frontal portion of the attached existing shoe 18. The toe assembly 10 is coupled to the toe section 8 of the shoe mount 1, wherein the toe assembly 10 specifically engages the exterior surface 3 and the rigid lower section 6 located on the toe section 8 of the shoe mount 1. In the current embodiment of the present invention the toe assembly 10 comprises a reinforced toe section sidewall 11 and a lower toe section tread 12. The reinforced toe section sidewall 11 is provided as the portion of the toe assembly 10 that engages the exterior surface 3. The reinforced toe section sidewall 11 adds a protective barrier to the exterior surface 3 that additionally functions as a structural support bracing the lateral portions of the toe section 8. The reinforced toe section sidewall 11 decreases the flexibility of the exterior surface 3 directly coupled to the toe assembly 10 in order to prevent torsion and compression during movement. The lower toe section tread 12 provides a barrier for the attached existing shoe 18 that increases the longevity of the attached existing shoe’s 18 sole. Through the use of the lower toe section tread 12 the attached existing shoe’s 18 soles avoid direct contact with the ground surface. Additionally, the lower toe section tread 12 functions as a ground contacting element that increases the traction of the attached existing shoe 18. The lower toe section tread 12 provides a particular tread pattern for the toe section 8 of the shoe mount 1 that allows for better gripping of ground surfaces.

RE 0016] Referencing FIG. 3 and FIG. 4, the heel assembly 13 is a rearwardly positioned assembly that provides structural support to the shoe mount 1 and serves as the replacement sole for the rear portion of the attached existing shoe 18. The heel assembly 13 is coupled to the heel section 9 of the shoe mount 1, wherein the heel assembly 13 specifically engages the exterior surface 3 and the rigid lower section 6 located on the heel section 9 of the shoe mount 1. In the current embodiment of the present invention the heel assembly 13 comprises a reinforced heel section sidewall 14 and a lower heel section tread 15. The reinforced heel section sidewall 14 is provided as the portion of the toe assembly 10 that engages the exterior surface 3. The reinforced heel section sidewall 14 adds a protective barrier to the exterior surface 3 that additionally functions as a structural support, bracing the lateral portions of the heel section 9. The reinforced heel section sidewall 14 decreases the flexibility of the exterior surface 3 directly coupled to the heel assembly 13 in order to prevent torsion and compression during movement. The lower heel section tread 15 provides a barrier for the attached existing shoe 18 that increases the longevity of the attached existing shoe’s 18 sole. Through the use of the lower heel section tread 15 the attached existing shoe’s 18 soles avoid direct contact with the ground surface. Additionally the lower heel section tread 15 functions as a ground contacting element that increases the traction of the attached existing shoe 18. The lower heel section tread 15 provides a particular tread pattern for the toe section 8 of the shoe mount 1 that allows for better gripping of ground surfaces. Through the use of the lower toe section tread 12 the attached existing shoe’s 18 soles avoid direct contact with the ground surface.

RE 0017] Referencing FIG. 6 and FIG. 7, in the current embodiment of the present invention, the attachable shoe sole protector is provided as a means of increasing the longevity of an existing shoe’s 18 soles. A user can utilize any existing
shoe 18 with the present invention. With an existing shoe 18, the user would select an appropriate shoe sole protector, wherein the appropriate shoe sole protector would correspond to an existing shoe’s 18 size as well as the right or left sided shoe. Upon proper selection of the suitable attachable shoe sole protector, the user would orient the existing shoe 18 sole into alignment with the attachable shoe sole protector wherein, the user would position the existing shoe 18 into the shoe mount 1 aligning the toe portion of the existing shoe 18 with the toe section 8 of the shoe mount 1, and the heel portion of the existing shoe 18 with the heel section 9 of the shoe mount 1. With the existing shoe 18 in alignment with the shoe mount 1, the user would traverse the existing shoe 18 through the shoe mount opening 2. With the existing shoe 18 positioned within the shoe mount 1, the interior surface 4 would peripherally engage the exterior portion of the existing shoe 18, wherein the interior surface 4 engages the peripheral surface of the existing shoe 18 through the use of the adhesive material 5. With the shoe secured within the attachable shoe sole protector, the user would be able to utilize their shoe in a plurality of activities that includes but is not limited to sports related activities.

[0018] Referencing FIG. 1-5, in the current embodiment of the present invention, the toe assembly 10 and the heel assembly 13 each comprise a plurality of laterally positioned decorative mounts 16. The plurality of laterally positioned decorative mounts 16 are provided as a means of attaching aesthetic embellishments to the attachable shoe protectors. The plurality of laterally positioned decorative mounts 16 can be provided as a complementary mount for a particular aesthetic embellishment or as a non-specific engagement for a plurality of aesthetic embellishments. The plurality of laterally positioned decorative mounts 16 are located on the reinforced toe section sidewall 11 and the reinforced heel section sidewall 14. Although, the plurality of laterally positioned decorative mounts 16 are not explicitly described as functioning as a modular system, it should be noted that the attachment of an aesthetic embellishment could be accomplished through the use of at least one laterally positioned decorative mount of the plurality of laterally positioned decorative mounts 16.

[0019] Referencing FIG. 6 and FIG. 7, in the current embodiment of the present invention, the shoe mount 1, the toe assembly 10, and the heel assembly 13 each comprise a lateral printing surface 17. The lateral printing surface 17 is provided as a means of enabling graphical designs to be printed onto the surfaces of the shoe mount 1, the toe assembly 10, and the heel assembly 13. The lateral printing surface 17 is positioned on the exterior surface 3 of the shoe mount 1. The lateral printing surface 17 is positioned on the toe section sidewall 11 of the toe assembly 10. The lateral printing surface 17 positioned on the heel section sidewall 14 of the heel assembly 13. Although the permanence of the graphical design and colors added to the lateral printing surface 17 is not explicitly described, it should be noted that the lateral printing surface 17 may be provided in a manner that allows temporary graphical designs and colors as well as more permanent graphical designs and colors.

[0020] In an additional embodiment of the present invention, the toe assembly 10 is provided with an extended configuration. The extended configuration of the toe assembly 10 additionally comprises a toe guard. The toe guard is positioned above the reinforced toe section sidewalk 11 and spans the shoe mount opening 2 proximal to the toe section 8. The toe guard is a concave structure, whose concavity faces towards the heel section 9 of the shoe mount 1. The toe guard provides two additional inventive features to the toe assembly 10. The toe guard provides greater protection to the frontal portion of the existing shoe 18. The toe guard accomplishes this by adding a reinforced structure that covers the frontal portion of the attachable existing shoe 18. The toe guard provides the shoe mount 1 with a more secure attachment with the attachable existing shoe 18. The toe guard accomplishes this through relational positioning with the interior surface 4. The toe guard’s concavity is found positioned coincident with the interior surface 4, resulting in a structural arrangement that partially covers the frontal portion of the existing shoe 18. This arrangement functions as a localized enclosure for the existing shoes 18 that reduces unwanted movement and improves the attachment between the existing shoe 18 and the attachable shoe sole protector.

[0021] Although the invention has been explained in relation to its preferred embodiment, it is to be understood that many other possible modifications and variations can be made without departing from the spirit and scope of the invention as hereinafter claimed.

What is claimed is:
1. An attachable shoe sole protector comprises:
   - a shoe mount;
   - a toe assembly;
   - a heel assembly;
   - the shoe mount comprises a shoe mount opening, an exterior surface, an interior surface, a rigid lower section, shaped contours, a toe section, and a heel section;
   - the toe assembly comprises a reinforced toe sidewall and a lower toe section tread;
   - the heel assembly comprises a reinforced heel sidewall and a lower heel section tread;
   - the interior surface comprises an adhesive material; and
   - the shoe mount being positioned between the toe assembly and the heel assembly.
2. The attachable shoe sole protector as claimed in claim 1 comprises:
   - the shoe mount opening being positioned parallel to the rigid lower section;
   - the interior surface being bordered by the exterior surface and the rigid lower section;
   - the toe assembly being coupled to the exterior surface opposite the interior surface;
   - the toe assembly being coupled to the rigid lower section opposite the interior section;
   - the heel assembly being coupled to the exterior surface opposite the interior surface; and
   - the heel assembly being coupled to the rigid lower section opposite the interior section.
3. The attachable shoe sole protector as claimed in claim 1 comprises:
   - the shoe mount being longitudinally divided into the toe section and the heel section by the shaped contours;
   - the shaped contours being found between the toe assembly and the heel assembly along the length of the shoe mount;
   - the toe assembly being positioned coincident to the toe section; and
   - the heel assembly being positioned coincident to the heel section.
4. The attachable shoe sole protector as claimed in claim 1 comprises:
the reinforced toe sidewall being coincident with the exterior surface located on the toe section of the shoe mount; the reinforced heel sidewall being coincident with the exterior surface located on the heel section of the shoe mount; the lower toe section tread being coincident with the rigid lower section located on the toe section of the shoe mount; and the lower heel section tread being coincident with the rigid lower section located on the heel section of the shoe mount.

5. The attachable shoe sole protector as claimed in claim 1 comprises:
the interior surface being layered by the adhesive material; and
the adhesive material being positioned between the interior surface and a peripheral surface, wherein the peripheral surface belongs to an attached existing shoe.

6. The attachable shoe sole protector as claimed in claim 1 comprises:
the toe assembly and the heel assembly each comprise a plurality of laterally positioned decorative mounts wherein, the plurality of laterally positioned decorative mounts offer a mounting point for various aesthetic embellishments.

7. The attachable shoe sole protector as claimed in claim 1 comprises:
the shoe mount, the toe assembly, and the heel assembly each comprise lateral printing surfaces, wherein the lateral printing surfaces provide a means of incorporating graphical designs onto the surfaces of the shoe mount, the toe assembly, and the heel assembly.

8. An attachable shoe sole protector comprises:
a shoe mount;
a toe assembly;
a heel assembly;
the shoe mount comprises a shoe mount opening, an exterior surface, an interior surface, a rigid lower section, shaped contours, a toe section, and a heel section;
the toe assembly comprises a reinforced toe sidewall and a lower toe section tread;
the heel assembly comprises a reinforced heel sidewall and a lower heel section tread;
the interior surface comprises an adhesive material;
the shoe mount being positioned between the toe assembly and the heel assembly;
the shoe mount opening being positioned parallel to the rigid lower section;
the interior surface being bordered by the exterior surface and the rigid lower section;
the toe assembly being coupled to the exterior surface opposite the interior surface;
the toe assembly being couple to the rigid lower section opposite the interior section;
the heel assembly being coupled to the exterior surface opposite the interior surface;
the heel assembly being couple to the rigid lower section opposite the interior section;
the shoe mount being longitudinally divided into the toe section and the heel section by the shaped contours;
the shaped contours being found between the toe assembly and the heel assembly along the length of the shoe mount;
the toe assembly being positioned coincident to the toe section; and
the heel assembly being positioned coincident to the heel section.

9. The attachable shoe sole protector as claimed in claim 8 comprises:
the reinforced toe sidewall being coincident with the exterior surface located on the toe section of the shoe mount; the reinforced heel sidewall being coincident with the exterior surface located on the heel section of the shoe mount; the lower toe section tread being coincident with the rigid lower section located on the toe section of the shoe mount; the lower heel section tread being coincident with the rigid lower section located on the heel section of the shoe mount; the interior surface being layered by the adhesive material; and
the adhesive material being positioned between the interior surface and a peripheral surface, wherein the peripheral surface belongs to an attached existing shoe.

10. The attachable shoe sole protector as claimed in claim 8 comprises:
the toe assembly and the heel assembly each comprise a plurality of laterally positioned decorative mounts wherein, the plurality of laterally positioned decorative mounts offer a mounting point for various aesthetic embellishments.

11. The attachable shoe sole protector as claimed in claim 8 comprises:
the shoe mount, the toe assembly, and the heel assembly each comprise lateral printing surfaces, wherein the lateral printing surfaces provide a means of incorporating graphical designs onto the surfaces of the shoe mount, the toe assembly, and the heel assembly.

12. An attachable shoe sole protector comprises:
a shoe mount;
a toe assembly;
a heel assembly;
the shoe mount comprises a shoe mount opening, an exterior surface, an interior surface, a rigid lower section, shaped contours, a toe section, and a heel section;
the toe assembly comprises a reinforced toe sidewall and a lower toe section tread;
the heel assembly comprises a reinforced heel sidewall and a lower heel section tread;
the interior surface comprises an adhesive material;
the shoe mount being positioned between the toe assembly and the heel assembly;
the shoe mount opening being positioned parallel to the rigid lower section;
the interior surface being bordered by the exterior surface and the rigid lower section;
the toe assembly being coupled to the exterior surface opposite the interior surface;
the toe assembly being coupled to the rigid lower section opposite the exterior surface;
the heel assembly being coupled to the exterior surface opposite the interior surface;
the heel assembly being coupled to the rigid lower section opposite the exterior section;
the shoe mount being longitudinally divided into the toe section and the heel section by the shaped contours;
the shaped contours being found between the toe assembly and the heel assembly along the length of the shoe mount;
the toe assembly being positioned coincident to the toe section;
the heel assembly being positioned coincident to the heel section;
the reinforced toe sidewall being coincident with the exterior surface located on the toe section of the shoe mount;
the reinforced heel sidewall being coincident with the exterior surface located on the heel section of the shoe mount;
the lower toe section tread being coincident with the rigid lower section located on the toe section of the shoe mount;
the lower heel section tread being coincident with the rigid lower section located on the heel section of the shoe mount;
the interior surface being layered by the adhesive material; and
the adhesive material being positioned between the interior surface and a peripheral surface, wherein the peripheral surface belongs to an attached existing shoe.

13. The attachable shoe sole protector as claimed in claim 12 comprises:
the toe assembly and the heel assembly each comprise a plurality of laterally positioned decorative mounts wherein, the plurality of laterally positioned decorative mounts offer a mounting point for various aesthetic embellishments.

14. The attachable shoe sole protector as claimed in claim 12 comprises:
the shoe mount, the toe assembly, and the heel assembly each comprise lateral printing surfaces, wherein the lateral printing surfaces provide a means of incorporating graphical designs onto the surfaces of the shoe mount, the toe assembly, and the heel assembly.

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