Shoe with interchangeable and detachable upper

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Abstract

A shoe assembly includes a main portion, a sole, and a detachable upper. The main portion includes an opening for a foot and a top portion having a first engagement feature thereon. The sole is coupled to bottom edges of the top portion. The detachable upper has a top side and an underside, at least a portion of the underside of the detachable upper having a second engagement feature thereon, the second engagement feature being configured to engage with the first engagement feature. The detachable upper covers substantially all of the top portion of the main portion.

Related U.S. Application Data

Provisional application No. 61/688,915, filed on May 25, 2012.
SHOE WITH INTERCHANGEABLE AND DETACHABLE UPPER

CROSS REFERENCE TO RELATED APPLICATIONS

[0001] This application claims priority to U.S. Provisional Application No. 61/688,915, filed May 25, 2012, the contents of which are incorporated entirely herein by reference.

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FIELD OF THE INVENTION

[0003] The present invention relates generally to shoes with interchangeable and detachable uppers, and, more particularly, to baby shoes with interchangeable and detachable uppers.

BACKGROUND OF THE INVENTION

[0004] There is a wide variety of baby and toddler shoes available on the market. Baby shoes are used from the early walking stages of a baby. Baby shoes protect the baby’s feet, without constricting or hindering movement. It is common for a consumer to purchase multiple pairs of shoes of the same style with a variety of designs, which can be very expensive. Moreover, baby shoes grow out of a particular shoe. Additionally, people often purchase shoes of different styles—e.g., slippers, booties, boots, and the like—to accommodate different needs, which can also be expensive.

[0005] It would be desirable to provide a baby or toddler shoe that addresses one or more of these deficiencies.

SUMMARY OF THE INVENTION

[0006] Some aspects disclosed herein relate to a shoe assembly that includes a main portion, a sole, and a detachable upper. The main portion includes an opening for a foot and a top portion having a first engagement feature thereon. The sole is coupled to bottom edges of the top portion. The detachable upper has a top side and an underside, at least a portion of the underside of the detachable upper having a second engagement feature thereon, the second engagement feature being configured to engage with the first engagement feature. The detachable upper covers substantially all of the top portion of the main portion.

[0007] According to a further aspect of the present invention, the detachable upper is configured to wrap around a wearer’s ankle, and the first engagement feature is positioned around at least a portion of the opening. The detachable upper may include first and second ends and third and fourth ends bridging the first and second ends. The first and second ends include elements for engaging one another. The third end has the second engagement feature thereon. Engaging the main portion with the detachable portion may convert the shoe assembly from being a low-top shoe to a high-top shoe.

[0008] Another aspect disclosed herein relates to a children’s shoe including a main portion and a detachable upper. The main portion includes an opening for a foot, a top section extending from the opening to a front of the main portion, and a back section proximate the opening. The detachable upper is configured to removably engage with the main body via a hook and loop fastener. The hook and loop fastener includes at least one engagement element. The detachable upper is configured to cover at least a portion of the top section. An underside of the detachable upper includes the at least one engagement element for removably engaging with at least a portion of the top section of the main portion.

[0009] Yet another aspect disclosed herein relates to a soft sole shoe assembly including a main portion, a soft sole, and a detachable upper. The main portion includes an opening for a foot and a top portion having a first engagement feature thereon. The soft sole is coupled to bottom edges of the top portion. The detachable upper has a top side and an underside. At least a portion of the underside of the detachable upper has a second engagement feature thereon. The second engagement feature is configured to engage with the first engagement feature. The detachable upper covers substantially all of the top portion of the main portion. The first engagement feature and the second engagement feature engage via a hook and loop arrangement.

[0010] The foregoing and additional aspects and implementations of the present disclosure will be apparent to those of ordinary skill in the art in view of the detailed description of various embodiments and/or aspects, which is made with reference to the drawings, a brief description of which is provided next.

BRIEF DESCRIPTION OF THE DRAWINGS

[0011] FIG. 1A is a top view of a baby shoe assembly;
[0012] FIG. 1B is an exploded side view of the baby shoe assembly of FIG. 1A;
[0013] FIG. 1C is a top view of an underside of a detachable upper for the baby shoe shown in FIG. 1A;
[0014] FIG. 2A is side view of a main portion of a baby shoe according to another embodiment;
[0015] FIG. 2B is a top view of an underside of a detachable upper for the main portion of the baby shoe shown in FIG. 2A;
[0016] FIG. 3A is a top view of detachable applies according to another embodiment;
[0017] FIG. 3B is an exploded side view of a baby shoe and the detachable applies of FIG. 3A;
[0018] FIG. 4A is a side view of a baby boot assembly according to one embodiment;
[0019] FIG. 4B is an exploded side view of the baby boot assembly of FIG. 4A; and
[0020] FIG. 5 is a top view of a detachable upper according to another embodiment.

[0021] While the invention is susceptible to various modifications and alternative forms, specific embodiments have been shown by way of example in the drawings and will be described in detail herein. It should be understood, however, that the invention is not intended to be limited to the particular forms disclosed. Rather, the invention is to cover all modifications, equivalents, and alternatives falling within the spirit and scope of the invention as defined by the appended claims.
DETAINED DESCRIPTION

FIG. 1A illustrates a top view of a shoe assembly 100 according to one embodiment of the present disclosure. Although in the embodiments discussed herein, the shoe assembly (e.g., the shoe assembly 100) is a baby shoe or a toddler shoe, it is contemplated that the concepts disclosed herein may also be applied to other types of shoes (e.g., children’s shoes, adult shoes, etc.). The shoe assembly 100 includes a main portion 104, a front section 108, and a back section 110.

The shoe assembly 100 includes a detachable upper 200 coupled to the main portion 104. The detachable upper 200 is positioned at the front section 108 of the shoe assembly 100 generally covering the child’s toes. The shoe assembly 100 also includes an opening 106 proximate the back section 110 for receiving a baby’s foot therethrough. The opening 106 may have an elasticized portion 107 to ensure comfort, ease of putting the shoe on and removing the shoe, and proper individual/snug fit for growing feet. The size or fit of the opening 106 may be adjustable via a pull string/tab (see, e.g., pull tab 309 of FIG. 2A), laces, straps, a locking toggle, or other suitable mechanism.

The detachable upper 200 is configured to wrap around and cover the anterior, front section 108 of the main portion 104, beginning generally at or near the opening 106 of the main portion 104 to a sole 118 of the main portion 104, as shown in FIGS. 1A-1B. The detachable upper 200 is reusable and may be detached and re-attached to the main portion 104 any desired number of times. The detachable upper 200 is removably coupled to a top 112 (see FIG. 1B) of the front section 108 of the main portion 104 using any suitable engagement element(s) 116, 216. Suitable engagement elements that may be used in the embodiments discussed herein include, but are not limited to, a pair of magnets, hook-and-loop fasteners (e.g., VELCRO®), snaps, hook-and-eye closing mechanisms, buttons, zippers, buckles, lacing, and other suitable means or any combination thereof. The engagement elements 116, 216 may be attached to the detachable upper 200 and the main portion 104 using any suitable means.

A first engagement element 216 may be positioned on all or substantially all of the underside 202 of the detachable upper 200 (see FIG. 1C) or any suitable portion thereof (see FIG. 2B). A second engagement element 216 is configured to mate with the first engagement element 116 positioned on the main portion 104 such that the first engagement element 116 mates with the second engagement element 216 on the detachable upper 200 and such that the detachable upper 200 overlays the front section 108 of the main portion 104. In the embodiment of FIGS. 1A-1C, the top 112 of the main portion 104 includes the “loop” portion of a VELCRO® fastener, and the underside 202 of the detachable upper 200 includes the “hook” portion of the VELCRO® fastener.

The engagement element 216 of the detachable upper 200 of FIGS. 1A-1C covers all or substantially all of the surface area of the underside 202 of the detachable upper 200, as shown in FIG. 1C. Likewise, the engagement element 116 of the main portion 104 covers all or substantially all of the surface area of the top 112 of the main portion 104. In order to attach the detachable upper 200 to the main portion 104, a user may align edges 220 of the detachable upper 200 with corresponding edges 120 of the main portion 104, as shown in FIG. 1B, and apply pressure such that the detachable upper 200 becomes attached to the main portion 104.

To disengage the detachable upper 200 from the main portion 104, the user may lift any edge 220 or portion of the detachable upper 200 away from the main portion 104. The user may continue lifting the detachable upper 200 until the main portion 104 and the detachable upper 200 are completely disengaged.

Although the embodiment of FIGS. 1A-1C includes a hook-and-loop-type fastener to attach the detachable upper 200 to the main portion 104, it is contemplated that any suitable type of attachment mechanism may be used in any of the embodiments described herein. For example, the embodiment of FIGS. 2A-2B utilizes a zipper to attach a detachable upper 400 to a main portion 304. Respective portions 316, 416 of the zipper positioned on the detachable upper 400 and the main portion 304 mate to form a zipper adjacent to a sole 318 of the main portion 304.

As shown in FIG. 1A, a top side 204 of the detachable upper 200 may include one or more decorative features 226. The decorative feature 226 may include a design, color, character, symbol, text, heading, any combination thereof, or the like. The decorative feature 226 of the detachable upper 200 of FIGS. 1A-1C includes butterflies and flowers. It may be desirable for the decorative feature 226 to include one or more child-pleasing accents and/or appliques.

The quickness and ease with which the detachable upper 200 may be attached to and detached from the main portion 104 allows for many possible looks to be achieved (e.g., giving the appearance of many different shoes) without actually requiring that entirely new shoes be purchased. In other words, the interchangeability of a variety of detachable upper to the main portion 104 allows a consumer to purchase only one pair of shoes (e.g., one pair of main portions 104), but to purchase a variety of different detachable upper 200 that may be removably attached to the main portions 104.

Purchasing detachable upper 200 instead of entirely new pairs of shoes each time a different design, color, style, etc. of shoe is desired has several potential advantages. First, purchasing detachable upper 200 is generally significantly less expensive and more environmentally friendly than purchasing an entirely new pair of shoes, since considerably less material is required. Moreover, providing an interchangeable and detachable upper 200 allows for the detachable upper 200 to be washed or cleaned by itself, without requiring washing or cleaning the entire shoe assembly 100 or the main portion 104. Likewise, the main portion 104 can be washed or cleaned separately from the detachable upper 200 (and vice versa), if needed.

Referring now to the embodiment of FIG. 2A, the main portion 304 of a shoe assembly is shown prior to assembly with the detachable upper 400 of FIG. 2B. An engagement element (e.g., zipper portion 316) of the embodiment of FIG. 2A is positioned along edges 320 of the main portion 304 adjacent the sole 318, forming a generally “U”-shape. FIG. 2B illustrates an underside 402 of the detachable upper 400, which includes a second engagement element (e.g., zipper portion 416) configured to engage with the zipper portion 316 positioned on the main portion 304. The zipper portion 416 of the detachable upper 400 also forms a generally “U”-shape along the edge of its underside 402. Although the illustrated embodiment of FIGS. 2A-2B shows the engagement elements 316, 416 having a generally “U”-shape, it is contemplated that the engagement elements may have other suitable shapes, patterns, or the like. Engagement elements that cover less than all of the detachable upper and/or main portion, such
as those illustrated in FIGS. 2A-2B, may be desirable, since less material is needed to form the engagement elements.

[0033] To engage the detachable upper 400 and the main portion 304, a user generally aligns the underside 402 of the detachable upper 400 with a top 312 of the main portion 304 and mates the engagement element 316 of the main portion 304 with the engagement element 416 of the detachable upper 400, thereby coupling the detachable upper 400 to the main portion 304.

[0034] According to a further aspect of the present invention, the detachable upper may be constructed in such a way that it may be used for a range of sizes of main portions. Thus, referring back to FIGS. 1A-1C, the same detachable upper 200 may end closer to the opening (e.g., opening 306 of FIG. 1A) for smaller sized main portions 104 and, e.g., may not quite reach the bottom edges 120 or the sole 118 for larger-sized main portions 104.

[0035] Referring now to FIGS. 3A-3B, a shoe assembly 100 is shown according to another embodiment. The shoe assembly 100 includes a main portion 104 and appliques or designs 240 and 242. In the exemplary embodiment of FIGS. 3A-3B, undersides 244, 246 of the appliques 240 and 242 include engagement features 216 configured to be removable and interchangeably attached to corresponding engagement features 116 of the main portion 104.

[0036] The embodiment of FIGS. 3A-3B may be desirable for use on shoes made for toddlers and grade school children. Such children might enjoy placing the appliques in various positions on the main portion, creating scenes, combining various appliques, or the like. For example, the appliques can be in the form of various facial features (to create various different faces on the shoe), puzzle pieces, holiday items, letters and/or numbers, etc.

[0037] Referring now to FIG. 4A, a shoe assembly 500 including a main portion 504 and a detachable upper 600 is shown according to yet another embodiment. When assembled, the detachable upper 600 has a generally cylindrical shape and is wrapped around a wearer's ankle and/or lower leg portion. The detachable upper 600 of the illustrated embodiment includes a rim feature 650 extending outwardly from a bottom end 652 of the detachable upper 600. The underside of the rim feature 650 includes an engagement feature. The engagement feature may be removably attached to a corresponding engagement feature 516 on the main portion 504 at an area surrounding a foot opening 506. Coupling the detachable upper 600 to the main portion 504, as shown in FIG. 4A, increases the overall height and changes shape of the resulting shoe assembly 500. Thus, the main portion 504 is transformed from a “low-top” or slipper to a “high-top” shoe, such as a boot or a bootie. The detachable upper 600 (or of at least a portion thereof) may be formed from a material that is configured to generally retain its shape while being stood upright, such as leather, boiled wool, or the like.

[0038] The embodiment of FIGS. 4A-4B may be desirable since it is often difficult to place a child's foot into a boot or bootie without exerting a substantial amount of force and effort, which may irritate or cause pain to the child. The shoe assembly 500 of FIGS. 4A-4B substantially reduces the force and effort required, since it is generally easier to put a child's foot into a “low-top” shoe (e.g., the main portion 504 of FIG. 4B) and simply wrap the “boot” portion (e.g., the detachable upper 600) around the child's ankle or leg after the main portion 504 has been placed onto the child's foot. The detachable upper 600 may, thus, include a second engagement element(s) 618 (see FIG. 4A) for maintaining the detachable upper 600 in a wrapped position around the child's ankle or leg.

[0039] It is contemplated that the embodiment of FIGS. 4A-4B may be combined with the other embodiments described herein (e.g., the embodiments of FIGS. 1A-1C, 2A-2B, 3A-3B). For example, the shoe assembly of FIG. 4A may further include a second removable detachable upper (such as, e.g., the detachable upper 200 of FIG. 1A) or removable appliques (such as the appliques 240, 242 of FIG. 3A).

[0040] Referring now to FIG. 5A an underside 802 of a detachable upper 800 is shown according to yet another embodiment. The detachable upper 800 includes a seam portion 853 and a bottom portion 855. Opposing ends 854 and 856 of the seam portion include engagement features 858 configured to mate with/engage one another. Thus, the detachable upper may be wrapped around a child's ankle and the opposing ends 854 and 856 may be attached to one another, holding the detachable upper 800 in place around the child's ankle. The detachable upper 800 may include additional engagement features 816 along edges 820 thereof for engaging with a main portion of a shoe.

[0041] The main portion of the shoe assemblies of the embodiments discussed herein may be suitable for wear by itself, e.g., without a detachable upper or any appliques being attached thereto. In such embodiments, the engagement element(s) of the main portion may be comprised of a material (e.g., the “loop” portion of a hook-and-loop-type fastener) that is suitable for engagement with another corresponding material (e.g., the “hook” portion of a hook-and-loop-type fastener) that may be attached to detachable uppers and/or appliques that may be used with the main portion. The engagement element(s) is desirably aesthetically pleasing such that the main portion can be worn with the engagement element(s) exposed, e.g., without any detachable uppers/appliques attached thereto. For example, the engagement element(s) of the main portion may itself be colored and/or be applied to the main portion in a visually pleasing shape or pattern.

[0042] The shoe assemblies and/or portions or components thereof of the embodiments described herein may include an inner lining, such as a mesh lining, neoprene lining, mesh neoprene lining, hydrophobic mesh lining, moisture-wick lining, or any combination thereof. The shoe assemblies and/or portions thereof may be machine-washable. The shoe assemblies and/or portions thereof may have a comfortable, breathable, lightweight, and/or flexible construction that allows the infant/child's walking to closely imitate barefoot walking for proper foot development. The shoe assemblies and/or portions thereof may be constructed of any suitable material, including plush, leather, suede, fabric, water-resistant fabric, nylon, wool, boiled wool, or any other suitable material.

[0043] The sole (e.g., sole 318 of FIG. 2A) of the shoe assemblies described herein may include suede, latex-dipped fabric, or other suitable materials. It may be desirable for the sole to be made of, e.g., suede, or another material that exhibits non-slip properties. The shoe assemblies may also include shock absorbers, such as natural crepe rubber to absorb shock, thereby providing lasting comfort. The shoe assemblies may also include a cushioned or a foam-cushioned footbed. The shoe assemblies and features thereof described herein may be applied to any type of shoe, boot, sandal, or the
like, including, but not limited to, infant or toddler slippers, booties, boots, bootie slippers, or the like.

[0044] It is contemplated that the various detachable uppers and appliques described herein can be used with various different styles of main portions. For example, a single detachable upper may be used with a low-top style main portion, a boot, main portions made of various different materials, etc.

[0045] While particular embodiments and applications of the present disclosure have been illustrated and described, it is to be understood that this disclosure is not limited to the precise construction and compositions disclosed herein and that various modifications, changes, and variations can be apparent from the foregoing descriptions without departing from the spirit and scope of the invention as defined in the appended claims.

What is claimed is:

1. A shoe assembly, comprising:
a main portion, the main portion including an opening for a foot and a top portion having a first engagement feature thereon;
a sole coupled to bottom edges of the top portion; and
detachable upper having a top side and an underside, at least a portion of the underside of the detachable upper having a second engagement feature thereon, the second engagement feature being configured to engage with the first engagement feature, wherein the detachable upper covers substantially all of the top portion of the main portion.

2. The shoe assembly of claim 1, wherein the sole portion is a non-slip sole.

3. The shoe assembly of claim 1, wherein the baby shoe is a soft-sole shoe.

4. The shoe assembly of claim 1, wherein at least one of the main portion and the detachable upper is constructed of leather, suede, fabric, or any combination thereof.

5. The shoe assembly of claim 1, wherein the first engagement feature and the second engagement feature include hook-and-loop-type fasteners.

6. The shoe of claim 1, wherein the first engagement element and the second engagement elements are magnets, snaps, zippers, or wherein the first engagement element and the second engagement element engage via a button-in-hole arrangement, hook-and-loop arrangement, lacing arrangement, or any combination thereof.

7. The shoe of claim 1, further comprising one or more appliques having a third engagement feature thereon, the third engagement feature being configured to engage with a fourth engagement feature positioned on the top side of the detachable upper.

8. The shoe of claim 1, wherein the detachable upper is configured to wrap around a wearer’s ankle, the first engagement feature being positioned around at least a portion of the opening.

9. The shoe of claim 8, wherein the detachable upper further includes first and second ends and third and fourth ends bridging the first and second ends, the first and second ends including elements for engaging one another, the third end having the second engagement feature thereon.

10. The shoe assembly of claim 9, wherein engaging the main portion with the detachable portion converts the shoe assembly from being a low-top shoe to a high-top shoe.

11. A children’s shoe, comprising:
a main portion including an opening for a foot, the main portion further including a top section extending from the opening to a front of the main portion and a back section proximate the opening; and
detachable upper, the detachable upper being configured to removably engage with the main body via a hook and loop fastener including at least one engagement element, wherein the detachable upper is configured to cover at least a portion of the top section, an underside of the detachable upper including the at least one engagement element for removably engaging with at least a portion of the top section of the main portion.

12. The children’s shoe of claim 11, wherein the detachable upper side includes an ornamental design thereon.

13. The shoe of claim 11, wherein the at least one engagement element includes a plurality of hooks, the top section of the main portion including a plurality of loops configured to be engaged by the plurality of hooks.

14. The shoe of claim 11, wherein the detachable upper covers substantially all of the top section of the main portion.

15. The show of claim 11, wherein the at least one detachable upper includes a plurality of detachable portions.

16. The shoe of claim 11, wherein an underside of the detachable upper includes a plurality of first engagement elements.

17. The shoe of claim 16, wherein a top of the main body includes a plurality of second engagement elements.

18. The shoe of claim 11, wherein the first engagement element and the second engagement elements are a pair of magnets or snaps or wherein the first engagement element and the second engagement element engage via a button-in-hole arrangement, hook-and-eye arrangement, lacing arrangement, zipper, or any combination thereof.

19. A soft sole shoe assembly, comprising:
a main portion, the main portion including an opening for a foot and a top portion having a first engagement feature thereon;
a soft sole coupled to bottom edges of the top portion; and
detachable upper having a top side and an underside, at least a portion of the underside of the detachable upper having a second engagement feature thereon, the second engagement feature being configured to engage with the first engagement feature, wherein the detachable upper covers substantially all of the top portion of the main portion, wherein the first engagement feature and the second engagement feature engage via a hook and loop arrangement.

20. The soft sole shoe assembly of claim 19, wherein engaging the first engagement feature and the second engagement feature converts the soft sole shoe assembly from being a low-top main portion to a high-top soft sole shoe assembly.