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Tussy(10) **Pub. No.: US 2015/0282553 A1**(43) **Pub. Date: Oct. 8, 2015**(54) **SANDAL WITH ADJUSTABLE STRAP****Publication Classification**(71) Applicant: **Kevin Alan Tussy**, Las Vegas, NV (US)(51) **Int. Cl.***A43B 3/26* (2006.01)*A43B 3/12* (2006.01)(72) Inventor: **Kevin Alan Tussy**, Las Vegas, NV (US)(52) **U.S. Cl.**CPC .. *A43B 3/26* (2013.01); *A43B 3/122* (2013.01)(21) Appl. No.: **14/678,838**

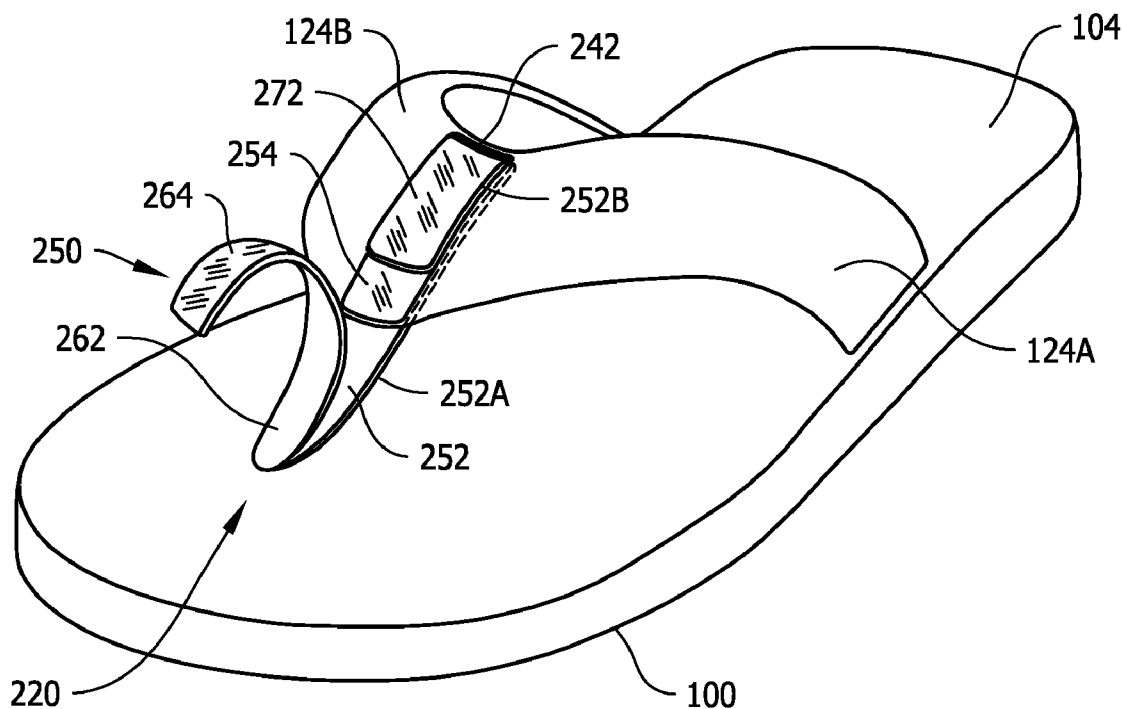
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ABSTRACT(22) Filed: **Apr. 3, 2015**

A sandal having an adjustable strap includes a sole having a foot bed, a toe strap, and a lateral strap. The two strap has a first end that connects to the sole and a second end that includes an attachment surface. The lateral strap has a first and second ends that connected to the sole and an attachment surface disposed between the first and second ends of the lateral strap. The attachment surfaces of the lateral strap and the toe strap are configured to be releasably connected at a plurality of positions relative to each other.

Related U.S. Application Data

(60) Provisional application No. 61/974,997, filed on Apr. 3, 2014.



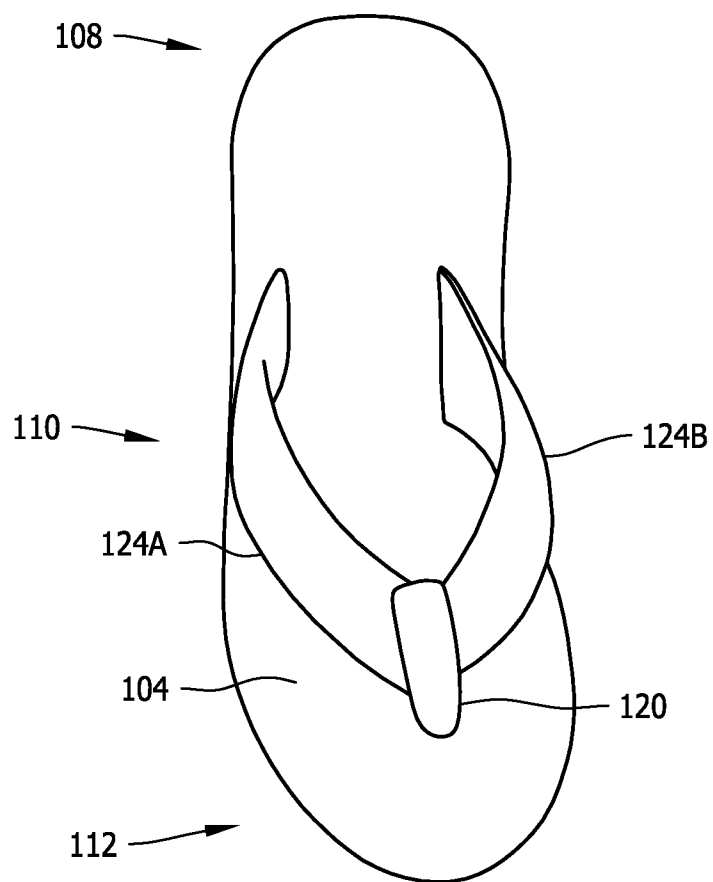


FIG. 1

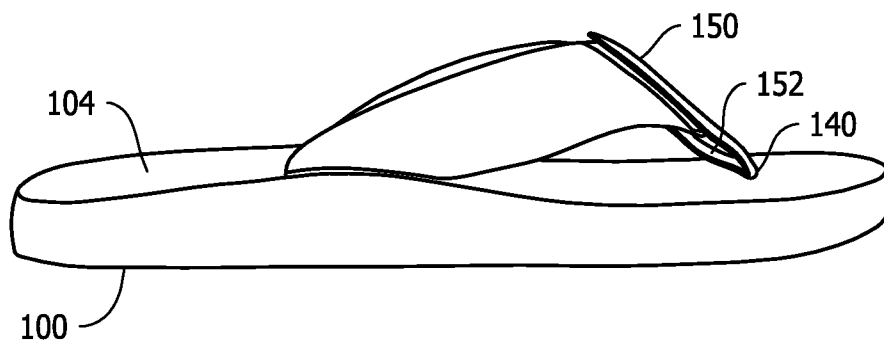


FIG. 2

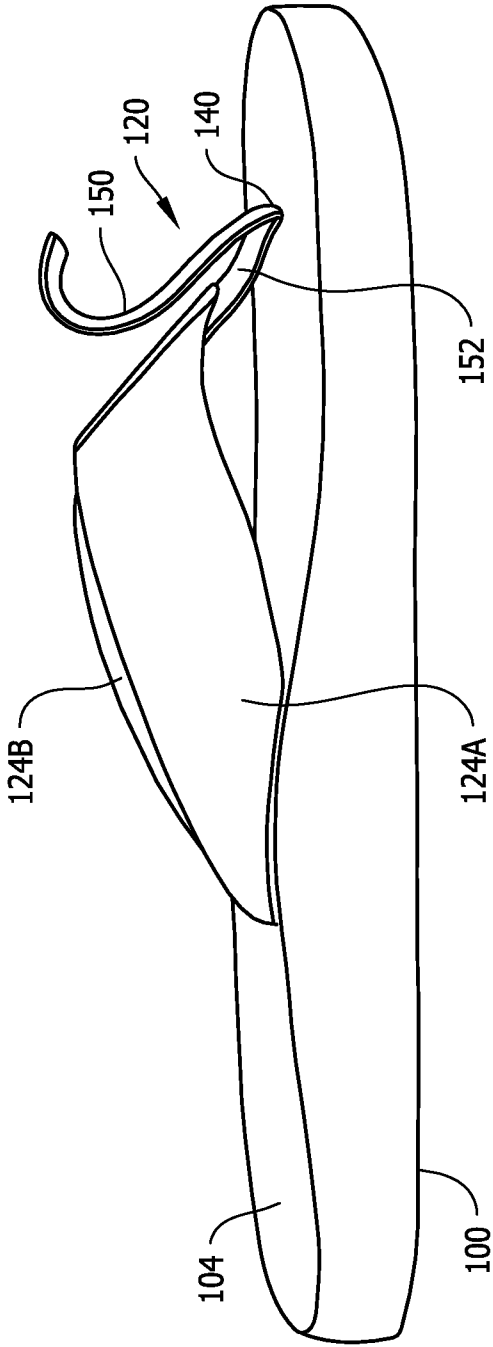
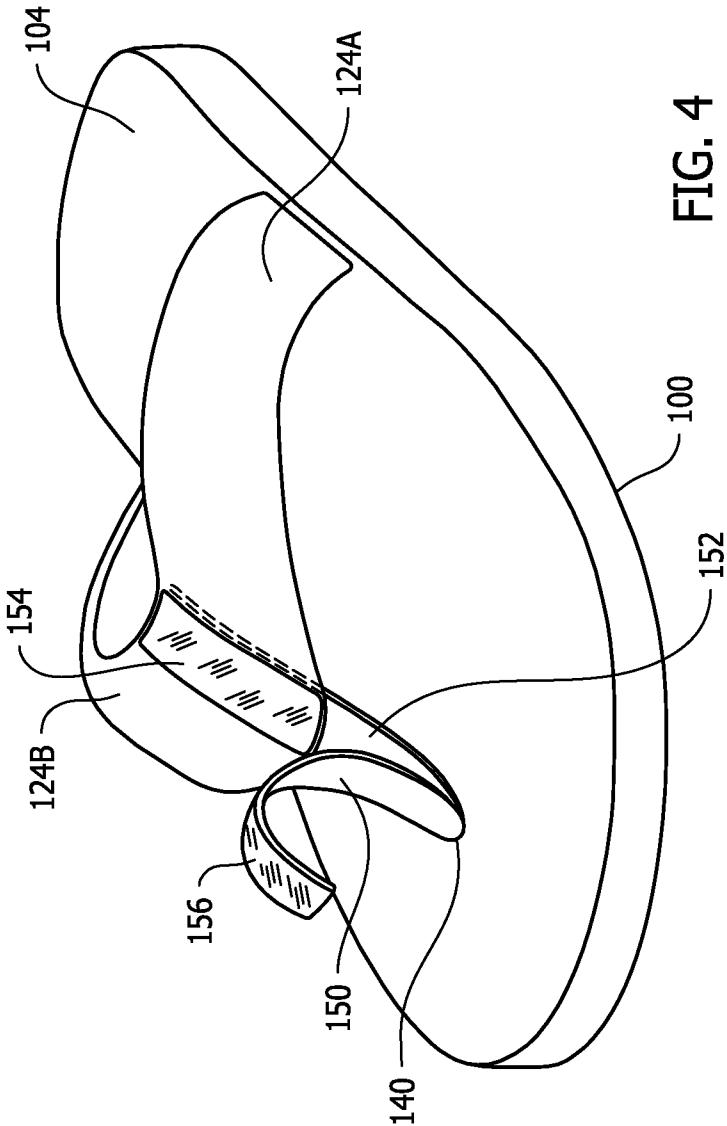


FIG. 3



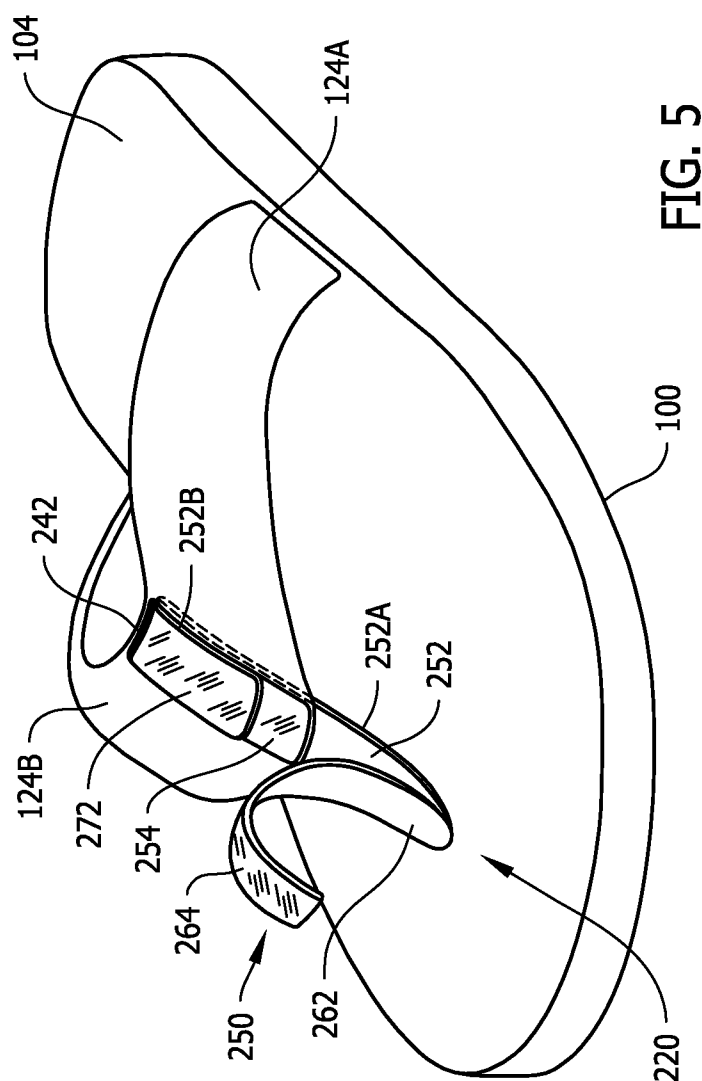


FIG. 5

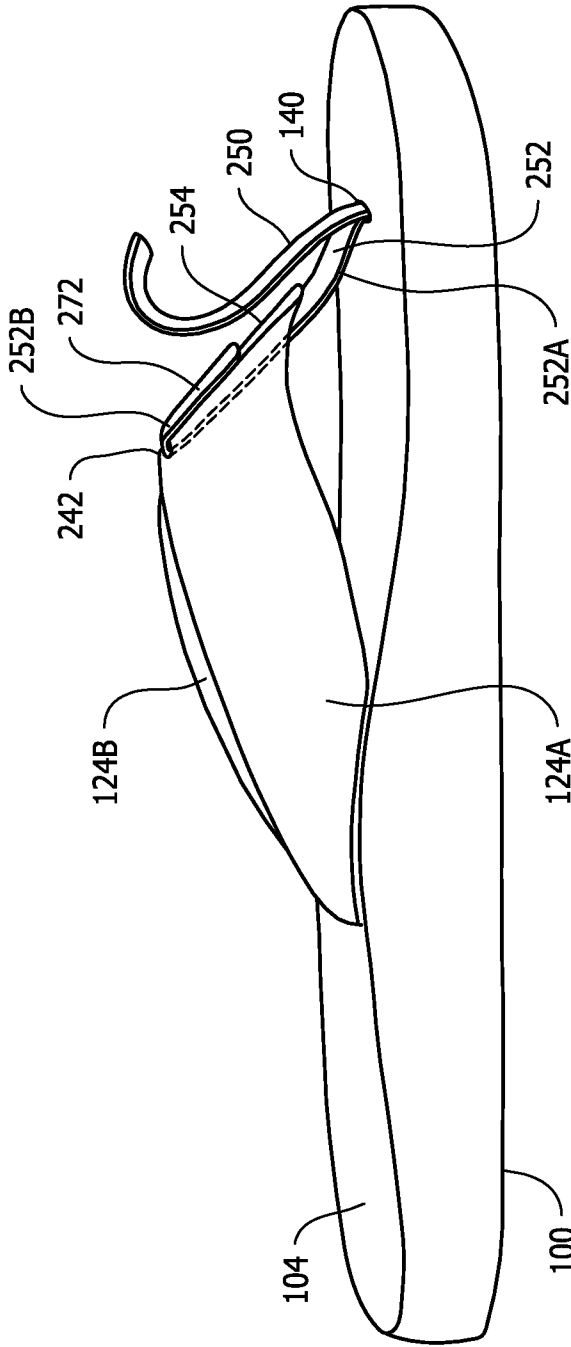


FIG. 6

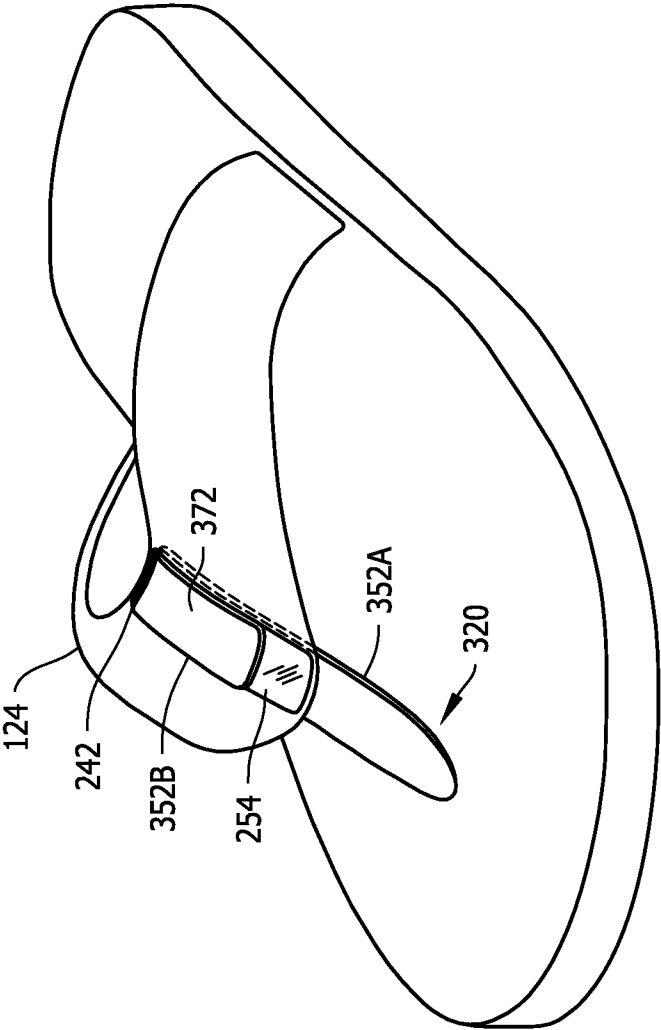


FIG. 7

SANDAL WITH ADJUSTABLE STRAP

CROSS REFERENCE TO RELATED APPLICATION

[0001] This application claims the benefit of and priority to U.S. Provisional Application No. 61/974,997 which was filed Apr. 3, 2014, the contents of which are hereby incorporated by reference.

BACKGROUND

[0002] 1. Field of the Invention

[0003] The invention relates to footwear and in particular to sandals which an adjustable strap.

[0004] 2. Related Art

[0005] Sandals, also known as flip flops, are popular footwear in warm weather and when engaged in many active or outdoor activities. In addition, sandals are often used after bathing, in the shower, or at the gym. Moreover, sandals are made in numerous styles to suit beach environments to high fashion.

[0006] While sandals are popular and have many benefits, present sandal designs suffer from at least one drawback. One drawback is that present sandal designs do not provide a proper fit for a large percentage of the population. And, even if the sandal were to fit the wearer at one time, it may not fit that same wearer at a later time due to changes in the size of a person's foot or if the sandal strap material stretches or shrinks.

[0007] Present sandal designs suffer from sizing issue because prior art sandals have a fixed size. With typical footwear, the size of the footwear is fixed based on the length and width of the footwear. Such footwear typically has adjustable laces that allow the footwear to be adjusted in size to fit wearers with different heights or widths of feet. However, a sandal (flip flop) has a fixed strap and toe strap lengths, and fixed positions at which these elements attach to the sandal, and are therefore not adjustable. For a given sandal that fits a person with an average size foot for a given foot size, a person with a wider or taller foot of the same length would not be able to fit their foot into the sandal. If their foot was to be forced into the sandal, it would not be a comfortable fit. Likewise, for that same sandal, a person with the same length foot, but whose foot is thin or not as tall, would find the sandal to not fit well because the sandal would be loose. Because the strap is loose, the sandal is likely to fall off the foot or irritate the foot when worn.

[0008] Therefore, there is a need in the art for a sandal which may adjust to the varying dimensions of different feet, even when the foot is of the same length.

SUMMARY

[0009] The disclosed embodiments have been developed in light of the above and aspects of the invention may include sandals with an adjustable strap that can be worn by users with feet having varying heights and widths for a given shoe size or lengths. Further aspects of the invention may include adjustable straps, and methods for adjusting the size of a sandal.

[0010] According to one embodiment, a sandal having an adjustable strap includes a sole having a foot bed, a toe strap, and a lateral strap. The toe strap has a first end that connects to the sole and a second end that includes an attachment surface. The lateral strap has a first and second ends that

connected to the sole and an attachment surface disposed between the first and second ends of the lateral strap. The attachment surfaces of the lateral strap and the toe strap are configured to be releasably connected at a plurality of positions relative to each other.

[0011] In some embodiments, the toe strap comprises an upper toe strap and a lower toe strap. The upper toe strap may include the toe strap attachment surface, and the lower toe strap may be permanently affixed to the lateral strap.

[0012] The sandal may further comprise a toe strap anchor that attaches the toe strap to the sole. The toe strap anchor may be configured to allow the toe strap to slide through the anchor. In some instances, the toe strap is elastic in a longitudinal direction.

[0013] In some embodiments, the attachment surfaces may each comprise one side of a hook and loop fastener. The loop side of the hook and loop fastener may be disposed on the lateral strap attachment surface in order to increase the comfort of a user.

[0014] In other embodiments, the sandal may further comprise a slot disposed in the lateral strap near a rearward edge of the lateral strap. This allows the toe strap to be received through the slot from a lower side to an upper side of the lateral strap. Here, the toe strap attachment surface may be disposed on an inner surface of the toe strap.

[0015] In some embodiments, the toe strap comprises an upper toe strap and a lower toe strap. The upper toe strap has the toe strap attachment surface, and the lower toe strap is configured to be received through the slot. The lower toe strap may comprise an inner attachment surface and an outer attachment surface. The inner attachment surface may be configured to releasably attach to the lateral strap attachment surface, and the outer attachment surface may be configured to releasably attach to the toe strap attachment surface. The toe strap attachment surface, the lateral strap attachment surface, the inner attachment surface, and the outer attachment surface may each comprise one side of a hook and loop fastener.

[0016] In one embodiment, there is a sandal having an adjustable strap that includes a sole, a toe strap, and lateral straps. The toe strap may comprise an upper toe strap and a lower toe strap, and may be anchored to the sole by a toe strap anchor. The lateral straps may comprise a first end connected to the sole and a second end connected to the lower toe strap. A first attachment surface may be disposed on an upper surface of the lower toe strap; and a second attachment surface may be disposed on a lower surface of the upper toe strap. In this manner, the first and second attachment surfaces are configured to attach the lower toe strap to the upper toe strap at a plurality of positions relative to each other, allowing the sandal to be adjustable in size.

[0017] In this embodiment, the first and second attachment surfaces each comprise one side of a hook and loop fastener. Further, the toe strap anchor may be configured to allow the toe strap to slide there through.

[0018] According to other embodiments, there is a method for adjusting a size of a sandal. The method includes providing a sandal that comprises a sole having a foot bed, a toe strap comprising a first end connected to the sole and a second end that comprises a toe strap attachment surface, and a lateral strap comprising a first end connected to the sole, a second end connected to the sole; and a lateral strap attachment surface disposed between the first end and second ends of the lateral strap. With such a sandal, a user may remove and

reattach the lateral strap attachment surface to the toe strap attachment surface at one of a plurality of positions relative to each other, thereby allowing the size of the sandal to be adjusted.

BRIEF DESCRIPTION OF THE DRAWINGS

[0019] The components in the figures are not necessarily to scale, emphasis instead being placed upon illustrating the principles of the invention. In the figures, like reference numerals designate corresponding parts throughout the difference views.

[0020] FIG. 1 illustrates a top view of a sandal with adjustable straps according to one embodiment.

[0021] FIG. 2 illustrates a side view of the sandal of FIG. 1.

[0022] FIG. 3 illustrates a side view of the sandal of FIG. 1 with the adjustable strap in use, according to one embodiment.

[0023] FIG. 4 illustrates a perspective view of the sandal of FIG. 1 with the adjustable strap in use, according to one embodiment.

[0024] FIG. 5 illustrates a perspective view of a sandal with adjustable straps, according to one embodiment.

[0025] FIG. 6 illustrates a side view of the sandal of FIG. 5.

[0026] FIG. 7 illustrates a perspective view of a sandal with adjustable straps, according to one embodiment.

DETAILED DESCRIPTION OF EMBODIMENTS

[0027] FIGS. 1-4 illustrate a sandal with adjustable straps according to one exemplary embodiment. A sandal, often referred to as a flip flop, includes a sole **100** that is constructed with a foot bed **104** on a top surface of the sole. The sole **100** and foot bed **104** form a unitary structure. The sole **100** and foot bed **104** include a heel section **108** and an opposing toe section **112**. A mid-section **110** is between the heel section **108** and the toe section **112**. A toe strap **120** extends upward from the sole **100** and foot bed **104** near the front of the sandal from a toe strap anchor **140**. The toe strap **120** is the part of the sandal that is placed between the user's toes, such as between the user's first and second largest toes.

[0028] The top portion of the toe strap **120** connects to or extends into two or more lateral straps **124A**, **124B** that extend in a general V shape on the top of and to each side of the foot toward the heel section **108** or mid-section **110** of the sole **100** and foot bed **104**. The toe strap **120** and lateral straps **124** may be made of any type material such as fabric, strapping, plastic, rubber, leather, synthetic leather, hook and loop material, or any other material.

[0029] In use, the user places their foot on the foot bed **104** of the sandal under and between the V shaped lateral straps **124**. The foot is pushed forward such that the toe strap **120** of the sandal slides between the user's two largest toes. Placement of the foot under the lateral straps **124** and placement the toe strap **120** between the user's toes secures the sandal to the user's foot.

[0030] For purposes of discussion, a foot size is defined by three primary dimensions, namely the length, width, and height. Each dimension may change along different positions on the foot. The length is generally measured from the back of the heel to the tip of the longest toe. Traditional shoe sizing, particularly for sandals, only defines the size of the footwear by the length of the foot. While in some cases, the size may also define a wide or narrow fit for a given length, this is not typical with sandals such as flip flops. As a result, two people

with the same length foot (same shoe size) may have substantially different foot widths and foot heights. In addition, the foot width and foot height may change over the course of a day or the course of a month.

[0031] The sandal is ideally fit when the user is able fit their foot under the strap **124** and forward into the proper foot position on the foot bed **104**. In many instances when the foot is too loose in the sandal, or the foot is too tight in the sandal, a less than ideal fit is established which leads to discomfort to the user, blisters, or the sandal falling off during use.

[0032] In addition, an adjustable sandal strap allows the sandal to be adjusted to fit different users or a user as that user grows. For example, as a child grows, the sandal strap may be adjusted to account for growth of the child. Likewise, sandals may be shared between people. Moreover, stores can now stock only once sandal in one size fits all configuration.

[0033] Accordingly, in this embodiment as shown in FIGS. 2-4, the sandal further includes an adjustment feature that allows the length of the toe strap **120** to be adjusted. In this example embodiment, the toe strap **120** is separated into two or more elements. An upper toe strap **150** extends up from the sole **100** of the sandal and is configured to be removably attachable to a top surface of the lateral straps **124**. A lower toe strap **152** extends up from the sole **100** of the sandal and is configured to attach to a bottom or rear surface of the lateral straps **124**.

[0034] The upper toe strap **150** is selectively attachable to an attachment surface **154**. The attachment surface **154** is disposed on a top surface of the lateral straps **124** so as to be in line with the toe strap **120**. The attachment surface **154** may be one side of a hook and loop fastener, commonly known by the trade name Velcro. For example, the attachment surface **154** may be covered with or includes the hook material while the upper toe strap **150** has a toe strap attachment surface **156** that is covered with or includes loop materials. Placing loop material on the upper toe strap **150** may provide a softer surface for the user for enhanced comfort.

[0035] It is noted that the embodiments are not limited to hook and loop fasteners. Any other suitable fastener may similarly be employed including buttons, snaps, hooks, and the like. Whichever fastener is selected, the fastener allows for the upper toe strap **150** to attach to the attachment surface **154** at a plurality of locations.

[0036] By the connection between the upper toe strap **150** and the attachment surface **154**, the straps **120**, **124** of the sandal may be adjusted to accommodate feet of different widths and heights for a given length or shoe size, or to accommodate foot size changes that occur during the course of the day or week. This is done by placing the upper toe strap **150** at different positions along the attachment surface **154** of the lateral strap **124** to effectively increase and decrease the distance between the lateral straps **124** and the foot bed **104**. Thus, by moving the lateral strap **124** upward or downward in relation to the foot bed **104**, and then attaching the attachment surface **154** of the lateral strap **124** to the toe strap attachment surface **156**, the size of the sandal is adjusted.

[0037] It is further contemplated that the lateral strap **124A**, **124B** may be made of one piece of material or two or more pieces of material that may be connected such as hook and loop fastener to provide further adjustability by allowing the length of the lateral strap to be lengthened or shortened. In such an embodiment, the distance between the foot bed **104** and the lateral strap **124** (at the attachment section) is thus

adjustable, as is the overall length of the lateral strap. The length of the lateral strap may be adjusted in any manner.

[0038] In some embodiments, the upper toe strap 150 and/or the lower toe strap 152 may be configured to be elastic in a longitudinal direction. The elasticity may further aid in the adjustability of the straps 120, 124 of the sandal.

[0039] The upper toe strap 150 and the lower toe strap 152 are anchored to the sole 100 by the toe strap anchor 140. In one embodiment, the upper and lower toe straps 150, 152 are formed as a single strap, and the toe strap anchor 140 is configured to allow the upper and lower toe straps 150, 152 to move through the anchor. Thus, if the upper toe strap 150 is pulled so as to be lengthened, then the length of the lower toe strap 152 is decreased.

[0040] In some embodiments, the lateral straps 124A, 124B are configured to extend from the sides of the toe strap 120. In this instance, lateral straps 124A, 124B extend laterally from each side of the lower toe strap 152. The attachment surface 154 is disposed on the upper surface of the lower toe strap 152.

[0041] In some embodiments, the toe strap 120 may be configured to surround the lateral straps 124 and be affixed thereto, such as by stitching, to increase the strength of the sandal. In this instance, the lower toe strap 152 may be configured to surround the lateral straps 124 and to be permanently attached thereto, such as by stitching. The attachment surface 154 may be disposed on the upper surface of the lower toe strap 152.

[0042] In other embodiments, different structures for the upper and lower toe strap 150, 152, and the attachment surface 154 may be used. For example, the toe strap 120 may comprise round shapes or multiple straps or bands of hook and loop material that connect and disconnect. By varying the location at which the upper toe strap 150 and the attachment surface 154 connect, the length (or height) of the toe strap is adjustable, which in turn adjusts the distance between the lateral straps 124 and the foot bed 104, and thus the fit of the sandal.

[0043] In another embodiment, the adjustment features described above may be implemented for the lateral straps 124 in addition to or place of the toe strap 120. For example, each of the right and left lateral straps 124A, 124B may comprise two straps which include hook and loop materials. The position at which the two straps connect via the hook and loop fasteners is adjustable to change the length of the lateral straps 124. By changing the length of the lateral straps the fit of the sandal may be adjusted.

[0044] FIGS. 5 and 6 illustrate a sandal with adjustable straps according to another exemplary embodiment. In this embodiment, the toe strap 120 is split into an upper toe strap 250 and a lower toe strap 252. The lateral straps 124 include an attachment surface 254 configured with material of one side of a hook and loop fastener. A slot 242 is disposed near the rearward edge of the attachment surface 254 of the lateral straps 124. The slot 242 is sized to receive the lower strap 252.

[0045] The lower strap 252 is comprised of a lower portion 252A and an upper portion 252B. The upper portion 252B is configured to fit through the slot 242 and fold downward onto the attachment surface 254. The upper portion 252B of the lower toe strap 252 has hook and loop material on both sides. In this manner, the upper portion 252B of the lower toe strap 252 fits through the slot 242 and folds down onto the attachment surface 254. The attachment surface 254 also comprises material for one side of hook and loop fastener which is

configured to fasten to one side of the upper portion 252B of the lower toe strap 252. This secures the lower toe strap 252 to the lateral straps 124 in an adjustable manner.

[0046] The upper toe strap 250 is also configured with material for one side of a hook and loop fastener disposed on an inner surface 264. An outer surface 262 does not comprise a hook and loop fastener, but may instead facilitate a logo or other decoration to be applied thereto. The hook and loop material on the inner surface 264 releasably secures to the attachment surface 254 and also to the outer surface 272 of the upper portion 252B of the toe strap 252 that extends through the slot 242 and is folded downward on to the attachment surface 254.

[0047] This embodiment provides the benefit of a very secure connection between the toe strap 120 and the lateral straps 124 while also allowing the outer surface 262 of the front strap 252 to cover and hide the hook and loop material on the attachment surface 254 and the outer surface 272 of the upper portion 252B of the lower toe strap 252.

[0048] In some embodiments, the lower surface of the lateral straps 124 may also include material for one side of a hook and loop fastener. This may be used to connect to the inner surface of the lower toe strap 252. This further helps to secure the lower toe strap 252 to the lateral straps 124.

[0049] To give further adjustability, the upper toe strap 250 and the lower toe strap 252 may be configured as a single, unitary strap. The toe strap anchor 140 that attaches the toe strap 120 to the sole 100 may allow the upper toe strap 250 and the lower toe strap 252 to slide through the anchor 140 to further enhance the adjustability of the sandal.

[0050] FIG. 7 illustrates a sandal with adjustable straps according to another exemplary embodiment. In this embodiment, the lateral straps 124 include an attachment surface 254 configured with material for one side of a hook and loop fastener on an outer surface. A slot 242 in the strap 124 is configured to receive an upper portion 352B of the toe strap 320 such that the upper portion 352B of the toe strap 320 fits through the slot 242 and folds downward on to the attachment surface 254.

[0051] In this embodiment, an outer surface 372 of the upper portion 352B of the toe strap 320 is not configured with hook and loop material. However, a lower surface of the lateral straps 124 may also be configured with material for one side of a hook and loop fastener to attach to the inner surface on the lower portion 352A of the toe strap 320. This further secures the lateral straps 124 to the toe strap 320. It is also noted that in this embodiment, as compared to those shown in FIGS. 1-6, the toe strap 320 does not need to include an upper and a lower two strap.

[0052] The various features of different embodiments may be combined in any combination or individually to form a sandal. While various embodiments of the invention have been described, it will be apparent to those of ordinary skill in the art that many more embodiments and implementations are possible that are within the scope of this invention. In addition, the various features, elements, and embodiments described herein may be claimed or combined in any combination or arrangement.

What is claimed is:

1. A sandal having an adjustable strap, the sandal comprising:
 - a sole that comprises a foot bed;
 - a toe strap that is anchored to the sole and comprises a toe strap attachment surface; and

- a lateral strap comprising:
 - a first end connected to the sole;
 - a second end connected to the sole; and
 - a lateral strap attachment surface disposed between the first end and second end of the lateral strap, the lateral strap attachment surface and the toe strap attachment surface being configured to releasably connect at a plurality of positions relative to each other.
- 2. The sandal according to claim 1, wherein the toe strap comprises an upper toe strap and a lower toe strap, the upper toe strap comprising the toe strap attachment surface, and the lower toe strap being permanently affixed to the lateral strap.
- 3. The sandal according to claim 2, further comprising a toe strap anchor that anchors the toe strap to the sole, the toe strap anchor being configured to allow the toe strap to slide through the toe strap anchor and the sole.
- 4. The sandal according to claim 1, wherein the toe strap is elastic in a longitudinal direction.
- 5. The sandal according to claim 1, wherein the toe strap attachment surface and the lateral strap attachment surface each comprise one side of a hook and loop fastener.
- 6. The sandal according to claim 5, wherein a loop side of the hook and loop fastener is disposed on the lateral strap attachment surface.
- 7. The sandal according to claim 1, further comprising a slot disposed in the lateral strap near a rearward edge of the lateral strap, the toe strap being configured to be received through the slot from a lower side to an upper side of the lateral strap.
- 8. The sandal according to claim 7, wherein the toe strap attachment surface is disposed on an inner surface of the toe strap.
- 9. The sandal according to claim 7, wherein the toe strap comprises an upper toe strap and a lower toe strap, the upper toe strap comprising the toe strap attachment surface, and the lower toe strap being configured to be received through the slot,
 - the lower toe strap comprises an inner attachment surface and an outer attachment surface, and
 - the inner attachment surface is configured to releasably attach to the lateral strap attachment surface, and the outer attachment surface is configured to releasably attach to the toe strap attachment surface.
- 10. The sandal according to claim 9, wherein the toe strap attachment surface, the lateral strap attachment surface, the inner attachment surface, and the outer attachment surface each comprise one side of a hook and loop fastener.
- 11. The sandal according to claim 1, further comprising a slot disposed in the lateral strap near a rearward edge of the lateral strap, wherein
 - the toe strap comprises an upper toe strap and a lower toe strap, the upper toe strap comprising the toe strap attachment surface,
 - the lower toe strap comprises an inner attachment surface and an outer attachment surface and is configured to be received through the slot from a lower side to an upper side of the lateral strap, and

the inner attachment surface is configured to releasably attach to the lateral strap attachment surface, and the outer attachment surface is configured to releasably attach to the toe strap attachment surface.

12. The sandal according to claim 11, wherein the toe strap attachment surface, the lateral strap attachment surface, the inner attachment surface, and the outer attachment surface each comprise one side of a hook and loop fastener.

13. The sandal according to claim 11, further comprising a toe strap anchor that attaches the toe strap to the sole, the toe strap anchor being configured to allow the toe strap to slide through the toe strap and the sole.

14. A sandal having an adjustable strap, the sandal comprising:

- a sole;
- a toe strap comprising an upper toe strap and a lower toe strap, the toe strap being prevented from sliding through the sole by a toe strap anchor;
- a lateral strap, formed of one or more sections, comprising ends connected to the sole;
- a first attachment surface disposed on an upper surface of the lower toe strap; and
- a second attachment surface disposed on a lower surface of the upper toe strap, the lower toe strap being configured to partially surround the lateral strap, and the first and second attachment surfaces being configured to attach the lower toe strap to the upper toe strap at a plurality of positions relative to each other.

15. The sandal according to claim 14, wherein the first and second attachment surfaces each comprise one side of a hook and loop fastener.

16. The sandal according to claim 14, wherein the toe strap anchor is configured to allow the toe strap to slide there through.

17. The sandal according to claim 14, wherein a connection section is disposed on the lateral strap, the connection surface being configured to releasably secure to at least one of the second attachment surface and a third attachment surface disposed opposite the first attachment surface of the lower toe strap to thereby releasably secure the lateral strap to the toe strap in either of a first position or a second position.

18. A method for adjusting a size of a sandal comprising: providing a sandal that comprises:

- a sole having a foot bed;
 - a toe strap that is anchored to the sole and comprises a toe strap attachment surface; and
 - a lateral strap comprising a first end connected to the sole, a second end connected to the sole; and a lateral strap attachment surface disposed between the first end and second ends of the lateral strap; and
- removing and reattaching the toe strap attachment surface to the lateral strap attachment surface at one of a plurality of positions along the lateral strap attachment surface to change the fit of the sandal.

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