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(54) **WEARABLE PEDICURE PROTECTION DEVICE**

TRAGBARE PEDIKÜRE-SCHUTZVORRICHTUNG

DISPOSITIF DE PROTECTION DE PÉDICURIE PORTABLE

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Description

FIELD OF INVENTION:

5 **[0001]** This present invention relates to footwear and more particularly to a reusable pedicure protection system, that when worn by the user, prevents damage to painted or treated toenails. One component of the invention that is the insert, can be worn interchangeably in various styles of shoes with the necessary space and shape or the invention can be worn in its entirety, meaning the insert and accompanying shoe.

10 BACKGROUND OF THE INVENTION:

[0002] People frequent manicure and pedicure salons as part of their beauty regimen, often having their nails painted as part of the treatment. After the application of nail polish, some time is typically spent under the nail dryer to ensure that the polish dries. For a pedicure, this reduces the likelihood of smudging or damage due to contact with shoes or other objects. During the warmer months, a person can opt to shorten the time spent at the salon under a dryer by donning open toed footwear after having their toenails painted or treated. This would allow the polish to air dry. During times of less favorable weather, for example rainy days or colder months of the year in which wearing closed toe and/or warmer footwear is a necessity, persons usually exercise one of the following options: (1) sitting under a nail dryer until the polish is dry, the result of which is wasted time (2) braving cold weather by wearing open toed shoes, which can generally be uncomfortable (3) wearing closed toe footwear which can possibly smudge the polish and prove costly as frequent touch ups are needed to fix the affected areas and (4) having their toes wrapped in 'saran' wrap before putting feet into shoes, which still poses a risk of smudging. For this application the term pedicure refers to any treatment or painting of the toenails.

20 **[0003]** Other devices have been proposed to address the challenge of wearing closed toe shoes without smudging painted or treated toenails. Some examples include US Pat No. 7,296,367 B2 to Kipnes; US Pat No. 7,134,225 B2 to Ashton; US Pat No. 7,421,807 B2 to Condie; US Pat No. 7,681,332 B2 to Allen and US Pat No. 5,946,823 to Yates. They are all variants of a design concept for a shoe with a removable toe covering which in theory never touches the user's toes. This structure has certain disadvantages such as:

- 30 (1) Toenail protection comes only with wearing these shoes. The user must therefore commit to buying a pair of these shoes, which can be costly, especially if they need to buy multiple pairs to create more wardrobe options. For example, in the case of US Pat No. 7,421,807 B2 to Condie, although the structure can be applied to different styles of shoes, the user must buy the pair of shoes
- 35 (2) The style of the shoe may not be suitable for the environment or the weather. The design of US Pat No. 7,681,332 B2 to Allen would not be appropriate for winter weather as it does not facilitate the wearing of socks and a substantial part of the foot is exposed. This applies also to US Pat No. 5,946,823 to Yates in which over half of the user's foot is exposed
- (3) The shoe design may not appeal to a person's aesthetic taste

40 **[0004]** Patent application US 2006/0064902 A1 discloses the features of the preamble of claim 1.

SUMMARY- OBJECTS AND ADVANTAGES

45 **[0005]** In light of the limitations and disadvantages mentioned in the previous patents:

- (a) It is an object of the present invention to provide a device that protects the user's toe from touching other surfaces thus protecting damaged or treated toes.
- (b) It is an object of the present invention to provide a pedicure protection system that allows the user to wear shoes shortly after a pedicure without damage to painted or treated toe nails
- 50 (c) It is an object of the present invention to provide a pedicure protection system that is worn directly on the foot and enables the user to walk about comfortably
- (d) It is an object of the present invention to provide a pedicure protection system comprised of an insert, which gives the user the flexibility to wear a variety of weather appropriate footwear or no footwear
- (e) It is an object of the present invention to provide a pedicure protection system that limits movement of the toes thereby preventing contact with a surface when the user is in motion.
- 55 (f) It is an object of the present invention to provide a pedicure protection system that can be easily cleaned.
- (g) It is an object of the present invention to provide a pedicure protection system that can be made in a variety of sizes and out of material that is durable yet comfortable on the skin.

(h) It is an object of the present invention to provide affordable shoes that can be worn in conjunction with the insert if the shoes currently owned by the user do not have the required space to accommodate the insert.

(i) It is an object of the present invention to provide a pedicure protection system that is a fraction of the cost of the prior art and more economical for the consumer.

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These and other advantages of one or more aspects will become apparent from a consideration of the ensuing description and accompanying drawings.

[0006] The invention is defined according to the claims.

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[0007] The invention provides footwear for use during or after a pedicure comprising: a) a base and a cover forming a cavity to accommodate a foot; b) toe straps configured to secure individual toes to said base; c) a separator connected with said base and located between the big toe and second toe, configured to make physical contact with said cover when said cover is closed; d) said cover contains two cutouts located on opposite sides for securing said cover with a band; e) said base contains two holes located on opposite sides for the attachment of said band; and f) said band is configured to accommodate the foot.

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[0008] In one embodiment of the invention, said cover is pivotally connected to said base by a hinge joint that allows the cover to open fully allowing unencumbered placement of the foot under a dryer.

[0009] In one embodiment of the invention, said cover is connected to said base with a matching tongue and groove design along the edges to secure said base to said cover and permit easy attachment and detachment.

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[0010] In one embodiment of the invention, said footwear is used as an insert for shoes and bends and flexes to allow comfortable walking and protection of the toes from contact with other surfaces allowing for drying of toenails without smudging or healing of injured toes and having an interchangeability with various shoes at any point during treatment.

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[0011] In one embodiment of the invention, said footwear is an insert for shoes. Optionally, said footwear is used as an insert for shoes and bends and flex to allow comfortable walking and protection of the toes from contact with other surfaces allowing for drying of toenails without smudging or healing of injured toes and having an interchangeability with various shoes at any point during treatment.

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[0012] In one embodiment of the invention, said footwear is used as a standalone device attached to the foot to permit the user to walk comfortably while the toenails are drying and without smudging.

[0013] In one embodiment, said footwear comprises:

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a) said band attached on two sides of said base through said holes to anchor securely said base and configured to accommodate and secure the foot; b) said separator placed between the big toe and adjacent second toe configured to maintain separation and to provide a structural support for said cover when closed and secured over said base; c) said toe straps configured to anchor the toes to said base; d) a hinge joint between said base and said cover allowing said cover to open and close fully and configured to permit complete accessibility of the toes for pedicure procedure; e) said base comprising an edge curvature configured to accommodate the toes; and f) said cover comprising an edge curvature configured to accommodate the toes .

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[0014] In one embodiment of the invention, said cover forms a cavity when closed with said base.

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[0015] In one embodiment of the invention, said base further comprises: a) a plurality of said separators to maintain the separation of the toes; and b) a plurality of said toe straps to anchor the toes.

[0016] In one embodiment of the invention, said footwear further comprises: a) rigidity to maintain its shape and thin enough to be inserted into shoes; b) flexibility so the user can comfortably engage in walking activity; c) heat resistance to withstand the use of a dryer for drying the toenails without any skin discomfort; and d) a contoured curvature of said cover to conform to the curvature of the foot instep.

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[0017] In one embodiment of the invention: (a) the said footwear has a variable length encompassing only the forefoot or any point up to the entire length of the foot; or (b) said footwear has a layer of cushioning on the inside surfaces to facilitate a comfortable walking stride.

[0018] In one embodiment of the invention: a) said footwear is provided in pairs to accommodate both the left and right foot; or b) said footwear is at most half the length of the foot starting from the toes.

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[0019] In one embodiment of the invention, said cover is pivotally connected to said base and said cover fully opens allowing the unencumbered placement of the foot under a dryer.

[0020] The invention also provides a shoe that can be worn with the insert of claim 4 or claim 5 comprising: a) an outer sole made of flexible material; b) an inner soft sole; c) a body made of a soft semi-rigid material for maintaining the shape and allowing for flexibility and comfort; and d) a detachable top part that is attached to said body or said sole secured with a closure device. In one embodiment, (a) said closure device is a zipper or adhesive type of material; (b) said top part fully opens to allow placement of the foot with attached said insert inside said shoe directly from above or from the side without forward sliding of the foot as in conventional shoes; (c) said top part and said closure device causes said shoe to fully secure the foot and said insert to facilitate and maintain various walking strides and speeds; (d) said top

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part is fully removable to expose the foot and said insert; (e) said top part is re-attachable to said shoe to secure the foot and said insert; or (f) said top part is fully removable to expose the foot and said insert and allow the top cover of said insert to be fully opened.

5 [0021] In accordance with the present embodiment, the pedicure protection device is composed of an insert that is worn directly on the foot, and a shoe with a toe cavity made to accommodate the insert. The insert is composed of two pieces that may be connected by a hinge. The cover is designed to open and close at the hinge without touching the toenail. Straps that run across the big toe, the second toe and the band over the instep, anchor the foot to the base and allow the user to walk comfortably. The shape of the cover above the toenails creates a cavity separating the toes from the cover. A protruding separator extends upwards between the big toe and the second toe to support the cover against downward pressures. This helps to maintain the space cavity between the toenail and the cover. The band across the instep also serves to keep the cover closed. The material used to make the cover and base will be thin due to the limited space in a shoe, but sturdy so that it maintains its shape. As this device is not a part of or attached to a shoe, the user can optionally wear as a shoe insert, or walk around comfortably wearing it without shoes. It can be worn either with regular shoes with the necessary space in the toe cavity, or with the shoes referred to as part of the invention in the beginning of this paragraph.

BRIEF DESCRIPTION OF THE DRAWINGS

20 [0022] Fig. 1 shows a perspective view of the embodiment when open as made for the right foot
 Fig. 2 shows a horizontal view if the embodiment when closed as made for the right foot
 Fig. 3 shows a top view of the embodiment when open as worn on the right foot
 Fig. 4 shows a top view of the embodiment when closed as worn on the right foot
 25 Fig. 5 shows a horizontal view of the embodiment when worn by a user inside of a shoe
 Fig. 6 shows a horizontal of an alternative version of the device with pivotal points on the left and right side of the foot
 Fig. 7 shows a top view of an alternative version of the device with the pivotal point on the side of the foot
 Fig. 8 shows a top view of an alternative version of the device with another means of keeping the cover closed. Fig. 8 is for reference only, and does not fall within the scope of the claims.
 30 Fig. 9 shows a cross sectional view of the shoe in the closed position
 Fig. 10 shows a cross sectional view of the shoe in the open position.

DRAWINGS - Reference Numerals

35	9 curvature of top cover	10 cover
	11 base	12 hinge
	13 space between toenail and cover	14 anchoring flaps
	15 adjustable toe straps for big toe	16 adjustable toe straps for second toe
40	17 adhesive material	18 toe separator
	19 holes for elastic	20 elastic band across instep
	21 nonadjustable toe straps made out of stretchy material	
	22 pivotal joints	23 strap to keep cover closed
	24 adhesive material	25 adhesive material on cover
45	26 shoe zipper	27 inner sole
	28 top of shoe	29 outer sole

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

50 [0023] Described herein is a foot device designed to protect injured, painted or treated toenails from damage or from general contact with other objects. The device is comprised of an insert that can be worn with any type of footwear in which there is available space. Such footwear includes, but is not limited to rain boots, winter boots and sneakers as well as the shoes described herein. Fig. 6, Fig. 7 and Fig. 8 illustrate how different characteristics can be combined to create alternative embodiments of the device. It is also comprised of shoes, which open fully as seen in Fig. 10 unlike most regular footwear.

55 [0024] The embodiment, as illustrated in Fig. 1 is composed of two parts, a cover 10 and a base 11 joined by a pivotal device, which in this embodiment is a hinge 12. In other variations, the cover and base may be joined pivotally in other

places, for example on either side of the foot as illustrated in Fig. 6 **22** or on one side of the foot as in Fig. 7. In yet another embodiment, the cover and base may be completely detachable from each other and connected to each other a variety of ways, including but not limited to a matching tongue and groove design along the edges to secure said base to said cover. In this embodiment, each piece spans at most half the length of the foot starting from the toes (the forefront).
 5 However, the lengths can also be either shorter or longer with the base extending the entire length of the foot and the cover encasing the top of the foot.

[0025] In the cover **10**, the area above the toenails is molded in a shape that creates a cavity, Fig. 5 **13**, between the nail and the inside surface of the protector when the user is still or in motion. In this embodiment the edge of the cover near the instep is curved **9**, however the cover may have other shapes.

[0026] In this embodiment, the base **11** has a flat tray like shape with an edge designed to provide support for the toe and limit forward motion of the foot relative to the device. In other variations of the device, the base may have indentations/recess channels for the toes and/ or ball of the foot. In yet another variation, there may be a longer base with an arch support. Attached to the base are two pairs of toe straps **15** and **16**. These toe straps are two pieces fastened to each other by an adhesive material **17**. In other variations of the device, there may be a strap for only one toe, or straps for a plurality of toes, which can also be structured as a continuous strap instead of two pieces fastened together as illustrated in Fig. 6, Fig. 7, and Fig. 8 **21**. According to the invention, a toe separator **18** is located between the big toe and the second toe. The height of the separator may exceed that of each of the user's toes. In other variations, toe separators can be placed between some or all of the toes, or there may be no separators at all in an alternative version which is not part of the invention. These variations are illustrated in Fig. 6, Fig. 7 and Fig. 8. On the left and right edges of the base are two holes **19** through which passes an elastic band **20**, which may be a continuous elastic piece. The elastic band helps to keep the cover closed if the user prefers to have it in this position. The band can be made of material other than elastic and also adjustable. In an alternative embodiment which is not part of the invention, there may be no elastic band, and the cover may be kept closed through a system of attachments between the cover and base including but not limited to Velcro as in Fig. 8 **23, 24, 25**, male and female snaps or matching tongue and groove along the edges.
 20 For this embodiment on either side of the cover is a cutout enclosed by two anchoring flaps **14**. The band **20** can be placed under the flaps as shown in Fig. 4 to reduce sliding. Other means of anchoring can also be used.

[0027] In this embodiment, the cover and base are made with a thin, plastic, heat resistant material. However other materials may be used such as rigid foam. The base of the insert may also be lined with a soft material to make it more comfortable.

[0028] The shoe as seen in Fig. 9 and Fig. 10 is designed with a toe cavity that accommodates the insert. It is structured such that unlike most shoes, the top part fully opens as seen in the embodiment presented in Fig. 10 to allow the foot with attached insert to enter the shoe directly from above or from the side without forward sliding of the foot as in conventional shoes. The top **28** is connected to the bottom by a closure such as a zipper. In other variations, other closure alternatives to zippers can be used, such as Velcro. In this embodiment, the zipper runs along the side of the shoe and around the front **26**. In another variation, the zippers may run along either side of the shoe and when opened the top may be connected to the sole at a connective point near the toe. In yet another variation, the top of the shoe may be fully detachable from the rest of the shoe and can be reattached. The shoe will have an outer sole **29**, made of a durable and flexible material such as rubber, plastic or other, allowing the shoe to be worn on outdoor surfaces, and a soft inner sole **27** made of soft comfortable material. The shoe will be made of a soft durable material that is semi rigid to maintain the shape of the shoe while retaining comfort and flexibility for example neoprene and constructed in varying styles including, but not limited to a low cut shoe that ends just below the ankle as shown in this embodiment or higher cut like a boot. The shoe fits securely on the foot, allowing the user to walk or move comfortably at any pace.

Operation

[0029] In use, this pedicure protection system is provided in pairs, to be worn on the left and right foot. The insert and shoe for each foot is the same except that one side is adapted to fit the right foot, and the other the left foot. Although the following description and illustrations are directed primarily to the right pedicure protection system, it should be understood that the discussion is equally relevant to the left pedicure protection system. The purpose of this embodiment is a protection device, which can be placed on the foot before, during or after the application of nail polish or toe treatment, is a separate entity from a shoe, and can subsequently be worn in a variety of shoes to protect a pedicure smudging or undoing any toe treatment.

[0030] During the pedicure process, the user wears the embodiment as illustrated in Fig. 3. The user slides their foot under the elastic **20** found on the lower end of the base. This elastic stabilizes the embodiment on the user's foot. The big toe and second are positioned on either side of the separator **18**. The adjustable straps **15, 16** are closed around the toes. The adhesive material **17** allows the user to adjust the tightness of the straps. The flat shape of the base, allows for the use of tissue or other materials to separate the toes.

[0031] After nail polish is applied, the user may decide to place their feet under the nail dryer while wearing the

embodiment. The hinge **12** or other type of attachment pivotally allows the cover to bend back far enough so that the foot can fit under a dryer unencumbered. The heat resistant plastic allows the user to sit under the dryer without the embodiment getting too hot and burning the skin. When the user decides to put their shoes on, they protect their pedicure by wearing the embodiment as shown in Fig. 4 and then place their foot in their shoe. In the closed position, the cover **10** is secured closed by anchoring the elastic **20** under the anchoring flaps **14**.

[0032] Fig. 5 illustrates how the embodiment would be worn in a shoe. Thus the design of this embodiment provides the user with a pedicure protection device that can be worn interchangeably with any shoes and at any point during the treatment.

Claims

1. Footwear for use during or after a pedicure comprising:

- a) a base (11) and a cover (10) forming a cavity to accommodate a foot;
- b) toe straps (15, 16) configured to secure individual toes to said base;
- c) a separator (18) connected with said base and located between the big toe and second toe, configured to make physical contact with said cover when said cover is closed; **characterized in that:**
- d) said cover contains two cutouts located on opposite sides for securing said cover with a band (20);
- e) said base contains two holes (19) located on opposite sides for the attachment of said band; and
- f) said band is configured to accommodate the foot.

2. The footwear according to claim 1, whereby said cover is pivotally connected to said base by a hinge joint that allows the cover to open fully allowing unencumbered placement of the foot under a dryer.

3. The footwear according to claim 1, whereby the said cover is connected to said base with a matching tongue and groove design along the edges to secure said base to said cover and permit easy attachment and detachment.

4. The footwear according to claim 1, whereby said footwear is an insert for shoes.

5. The footwear according to claim 1 or claim 4, whereby said footwear is usable as an insert for shoes and bends and flexes to allow comfortable walking and protection of the toes from contact with other surfaces allowing for drying of toenails without smudging or healing of injured toes and having an interchangeability with various shoes at any point during treatment.

6. The footwear according to claim 1, whereby said footwear is usable as a standalone device attached to the foot to permit the user to walk comfortably while the toenails are drying and without smudging.

7. The footwear according to claim 1, comprising:

- a) said band attached on two sides of said base through said holes to anchor securely said base and configured to accommodate and secure the foot;
- b) said separator placed between the big toe and adjacent second toe configured to maintain separation and to provide a structural support for said cover when closed and secured over said base;
- c) said toe straps configured to anchor the toes to said base;
- d) a hinge joint between said base and said cover allowing said cover to open and close fully and configured to permit complete accessibility of the toes for pedicure procedure;
- e) said base comprising an edge curvature configured to accommodate the toes; and
- f) said cover comprising an edge curvature configured to accommodate the toes.

8. The footwear according to claim 1, whereby said cover forms a cavity when closed with said base.

9. The footwear according to claim 1, said base further comprising:

- a) a plurality of said separators to maintain the separation of the toes; and
- b) a plurality of said toe straps to anchor the toes.

10. The footwear according to claim 1, whereby said footwear further comprising:

- a) rigidity to maintain its shape and thin enough to be inserted into shoes;
- b) flexibility so the user can comfortably engage in walking activity;
- c) heat resistance to withstand the use of a dryer for drying the toenails without any skin discomfort; and
- d) a contoured curvature of said cover to conform to the curvature of the foot instep.

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11. The footwear according to claim 1, whereby:

- (a) the said footwear has a variable length encompassing only the forefoot or any point up to the entire length of the foot; or
- (b) said footwear has a layer of cushioning on the inside surfaces to facilitate a comfortable walking stride.

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12. The footwear according to claim 1, whereby:

- a) said footwear is provided in pairs to accommodate both the left and right foot; or
- b) said footwear is at most half the length of the foot starting from the toes.

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13. The footwear according to claim 1, whereby said cover is pivotally connected to said base and said cover fully opens allowing the unencumbered placement of the foot under a dryer.

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14. A shoe that can be worn with the insert of claim 4 or claim 5, in combination with the insert of claim 4 or claim 5, the shoe comprising:

- a) an outer sole made of flexible material;
- b) an inner soft sole;
- c) a body made of a soft semi-rigid material for maintaining the shape and allowing for flexibility and comfort; and
- d) a detachable top part that is attached to said body or said sole secured with a closure device.

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15. The shoe and insert according to claim 14, whereby:

- (a) said closure device is a zipper or adhesive type of material;
- (b) said top part fully opens to allow placement of the foot with attached said insert inside said shoe directly from above or from the side without forward sliding of the foot as in conventional shoes;
- (c) said top part and said closure device causes said shoe to fully secure the foot and said insert to facilitate and maintain various walking strides and speeds;
- (d) said top part is fully removable to expose the foot and said insert;
- (e) said top part is re-attachable to said shoe to secure the foot and said insert; or
- (f) said top part is fully removable to expose the foot and said insert and allow the top cover of said insert to be fully opened.

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Patentansprüche

1. Fußbekleidung zur Verwendung bei oder nach einer Fußpflegebehandlung, die Folgendes umfasst:

- a) eine Basis (11) und eine Abdeckung (10), die einen Hohlraum zur Aufnahme eines Fußes bilden;
- b) Zehenschlaufen (15, 16), konfiguriert zum Befestigen einzelner Zehen an der genannten Basis;
- c) einen Separator (18), der mit der genannten Basis verbunden ist und sich zwischen dem großen Zeh und dem zweiten Zeh befindet, konfiguriert zur Herstellung eines physischen Kontakts mit der genannten Abdeckung, wenn die genannte Abdeckung geschlossen ist;

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dadurch gekennzeichnet, dass:

- d) die genannte Abdeckung zwei Ausschnitte enthält, die sich auf gegenüberliegenden Seiten zum Befestigen der genannten Abdeckung mit einem Band (20) befinden;
- e) die genannte Basis zwei Löcher (19) aufweist, die sich auf gegenüberliegenden Seiten zum Anbringen des genannten Bandes befinden; und
- f) das genannte Band zum Aufnehmen des Fußes konfiguriert ist.

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2. Fußbekleidung nach Anspruch 1, wobei die genannte Abdeckung mit der genannten Basis durch ein Drehgelenk schwenkbar verbunden ist, das ein vollständiges Öffnen der Abdeckung zulässt, so dass ein unbelastetes Platzieren des Fußes unter einem Trockner ermöglicht wird.
- 5 3. Fußbekleidung nach Anspruch 1, wobei die genannte Abdeckung mit der genannten Basis mit einem passenden Nut- und-Feder-Design entlang den Rändern verbunden ist, um die genannte Basis an der genannten Abdeckung zu befestigen und ein leichtes Anbringen und Lösen zuzulassen.
- 10 4. Fußbekleidung nach Anspruch 1, wobei die genannte Fußbekleidung eine Einlage für Schuhe ist.
- 15 5. Fußbekleidung nach Anspruch 1 oder Anspruch 4, wobei die genannte Fußbekleidung als Einlage für Schuhe benutzt werden kann und biegsam und nachgiebig ist, um ein bequemes Tragen und Schützen der Zehen vor Kontakt mit anderen Flächen zulässt, und das Trocknen von Zehennägeln ohne Verschmieren oder das Heilen von verletzten Zehen zuzulassen und um Austauschbarkeit mit verschiedenen Schuhen jederzeit während der Behandlung zu ermöglichen.
- 20 6. Fußbekleidung nach Anspruch 1, wobei die genannte Fußbekleidung als eigenstehende Vorrichtung benutzt werden kann, die am Fuß angebracht ist, damit der Benutzer bequem laufen kann, während die Zehennägel trocknen, und ohne zu verschmieren.
- 25 7. Fußbekleidung nach Anspruch 1, die Folgendes umfasst:
- a) das genannte Band an zwei Seiten der genannten Basis durch die genannten Löcher angebracht, um die genannte Basis sicher zu befestigen, konfiguriert zum Aufnehmen und Befestigen des Fußes;
 - b) den genannten Separator zwischen dem großen Zeh und dem benachbarten zweiten Zeh platziert, konfiguriert zum Halten der Trennung und zum Bereitstellen einer strukturellen Abstützung für die genannte Abdeckung, wenn sie über der genannten Basis geschlossen und befestigt ist;
 - c) die genannten Zehenschlaufen, konfiguriert zum Verankern der Zehen an der genannten Basis;
 - d) ein Drehgelenk zwischen der genannten Basis und der genannten Abdeckung, das das Öffnen und völlige Verschließen der genannten Abdeckung zulässt, konfiguriert zum Zulassen einer vollständigen Zugänglichkeit der Zehen für ein Fußpflegeverfahren;
 - e) die genannte Basis, die eine Randkrümmung aufweist, konfiguriert zum Aufnehmen der Zehen; und
 - f) die genannte Abdeckung, die eine Randkrümmung umfasst, konfiguriert zum Aufnehmen der Zehen.
- 35 8. Fußbekleidung nach Anspruch 1, wobei die genannte Abdeckung einen Hohlraum bildet, wenn sie mit der genannten Basis verschlossen ist.
- 40 9. Fußbekleidung nach Anspruch 1, wobei die genannte Basis ferner Folgendes umfasst:
- a) mehrere der genannten Separatoren zum Halten der Trennung der Zehen; und
 - b) mehrere der genannten Zehenschlaufen zum Verankern der Zehen.
- 45 10. Fußbekleidung nach Anspruch 1, wobei die genannte Fußbekleidung ferner Folgendes umfasst:
- a) Steifigkeit zum Halten ihrer Form, dünn genug, um in Schuhe eingelegt zu werden;
 - b) Flexibilität, so dass der Benutzer bequem darin gehen kann;
 - c) Hitzebeständigkeit, um den Gebrauch eines Trockners zum Trocknen der Zehennägel ohne Unbehagen für die Haut auszuhalten; und
 - d) eine konturierte Krümmung der genannten Abdeckung passend zur Krümmung des Fußrückens.
- 50 11. Fußbekleidung nach Anspruch 1, wobei:
- a) die genannte Fußbekleidung eine variable Länge hat, die nur den Vorderfuß oder jeden Punkt bis zu der gesamten Länge des Fußes umfasst; oder
 - b) die genannte Fußbekleidung eine Polsterschicht an den Innenflächen hat, um ein bequemes Schreiten zu erleichtern.
- 55 12. Fußbekleidung nach Anspruch 1, wobei:

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- a) die genannte Fußbekleidung in Paaren vorgesehen ist, um sowohl den linken als auch den rechten Fuß aufzunehmen, oder
- b) die Länge der genannten Fußbekleidung höchstens die Hälfte des Fußes beginnend mit den Zehen beträgt.

5 13. Fußbekleidung nach Anspruch 1, wobei die genannte Abdeckung schwenkbar mit der genannten Basis verbunden ist und die genannte Abdeckung vollständig öffnet, um ein unbelastetes Platzieren des Fußes unter einem Trockner zuzulassen.

10 14. Schuh, der mit der Einlage nach Anspruch 4 oder Anspruch 5 getragen werden kann, in Kombination mit der Einlage von Anspruch 4 oder Anspruch 5, wobei der Schuh Folgendes umfasst:

- a) eine Außensohle aus einem flexiblen Material;
- b) eine weiche Innensohle;
- c) einen Körper aus einem weichen halbstarren Material zum Halten der Form und zum Zulassen von Flexibilität und Komfort; und
- d) einen abnehmbaren oberen Teil, der an dem Körper oder an der genannten Sohle angebracht ist, befestigt mit einer Verschlussvorrichtung.

15 15. Schuh und Einlage nach Anspruch 14, wobei:

- a) die genannte Verschlussvorrichtung ein Reißverschluss oder ein Klebstoffmaterialtyp ist;
- b) der genannte obere Teil vollständig öffnet, um die Platzierung des Fußes mit angebrachter genannter Einlage in dem genannten Schuh direkt von oben oder von der Seite ohne Vorwärtsschieben des Fußes wie bei herkömmlichen Schuhen zuzulassen;
- c) der genannte obere Teil und die genannte Verschlussvorrichtung bewirken, dass der genannte Schuh den Fuß und die genannte Einlage vollständig befestigt, um verschiedene Schrittlängen und -geschwindigkeiten zu erleichtern und zu halten;
- d) der genannte obere Teil vollständig entfernt ist, um den Fuß und die genannte Einlage zu exponieren;
- e) der genannte obere Teil erneut an dem genannten Schuh angebracht werden kann, um den Fuß und die genannte Einlage zu befestigen; oder
- f) der genannte obere Teil vollständig entfernt werden kann, um den Fuß und die genannte Einlage zu exponieren und es zuzulassen, dass die obere Abdeckung der genannten Einlage vollständig geöffnet werden kann.

35 **Revendications**

1. Article chaussant destiné à être utilisé pendant ou après une pédicurie, comprenant :

- a) une base (11) et un couvercle (10) formant une cavité pour recevoir un pied ;
- b) des sangles d'orteil (15, 16) conçues pour fixer des orteils individuels à ladite base ;
- c) un séparateur (18) relié à ladite base et situé entre le gros orteil et le deuxième orteil, conçu pour établir un contact physique avec ledit couvercle quand ledit couvercle est fermé ;

45 **caractérisée en ce que :**

- d) ledit couvercle comporte deux découpes situées sur des côtés opposés pour fixer ledit couvercle avec une bande (20) ;
- e) ladite base comportant deux orifices (19) situés sur des côtés opposés pour l'attache de ladite bande ; et
- f) ladite bande étant conçue pour recevoir le pied.

50 2. Article chaussant selon la revendication 1, dans lequel ledit couvercle est relié en rotation à ladite base par une liaison d'articulation qui permet l'ouverture complète du couvercle pour permettre la mise en place sans entraves du pied sous un séchoir.

55 3. Article chaussant selon la revendication 1, dans lequel ledit couvercle est relié à ladite base par une conception de languettes et rainures correspondantes le long des bords, afin de fixer ladite base audit couvercle et permettre une attache et un détachement faciles.

4. Article chaussant selon la revendication 1, ledit article chaussant étant une pièce rapportée pour chaussures.
5. Article chaussant selon la revendication 1 ou 4, ledit article chaussant pouvant être utilisé comme une pièce rapportée pour chaussures et étant flexible pour permettre une marche confortable et assurer une protection des orteils contre un contact avec d'autres surfaces pour permettre le séchage des ongles de pied sans bavure et sans soins d'orteils blessés, et étant interchangeable avec diverses chaussures à n'importe quel stade du traitement.
6. Article chaussant selon la revendication 1, l'article chaussant pouvant être utilisé comme un dispositif autonome attaché au pied pour permettre à l'utilisateur de marcher confortablement pendant le séchage des ongles de pied et sans bavure.
7. Article chaussant selon la revendication 1, dans lequel :
- a) ladite bande est attachée à deux côtés de ladite base par lesdits orifices afin de fixer de manière sûre ladite base, et est conçue pour recevoir et fixer le pied ;
 - b) ledit séparateur placé entre le gros orteil et le deuxième orteil adjacent est conçu pour maintenir une séparation et servir de support structurel audit couvercle quand celui-ci est fermé et fixé sur ladite base ;
 - c) lesdites sangles d'orteil sont conçues pour fixer les orteils à ladite base ;
 - d) une liaison d'articulation entre ladite base et ledit couvercle permet l'ouverture et la fermeture complètes dudit couvercle, et est conçue pour permettre une accessibilité complète des orteils en vue d'une procédure de pédicurie ;
 - e) ladite base comprend une courbure des bords pour recevoir les orteils ; et
 - f) ledit couvercle comprend une courbure des bords pour recevoir les orteils.
8. Article chaussant selon la revendication 1, dans lequel ledit couvercle forme une cavité lorsqu'il est fermé avec ladite base.
9. Article chaussant selon la revendication 1, dans lequel ladite base comprend en outre :
- a) une pluralité desdits séparateurs afin de maintenir la séparation des orteils ; et
 - b) une pluralité desdites sangles d'orteil afin de fixer les orteils.
10. Article chaussant selon la revendication 1, ledit article chaussant ayant en outre :
- a) une rigidité lui permettant de maintenir sa forme et une épaisseur suffisamment fine pour permettre son insertion dans des chaussures ;
 - b) une flexibilité permettant à l'utilisateur d'entreprendre confortablement une activité de marche ;
 - c) une résistance à la chaleur pour résister à l'utilisation d'un séchoir destiné à sécher les ongles de pied sans aucune gêne pour la peau ; et
 - d) un profil courbé dudit couvercle pour épouser la courbure du cou-de-pied du pied.
11. Article chaussant selon la revendication 1,
- a) ledit article chaussant ayant une longueur variable englobant uniquement l'avant-pied un point quelconque jusqu'à la longueur entière du pied ; ou
 - b) ledit article chaussant ayant une couche d'amortissement sur les surfaces intérieures pour faciliter une foulée de marche confortable.
12. Article chaussant selon la revendication 1,
- a) ledit article chaussant étant fourni en paires pour recevoir le pied gauche et le pied droit ; ou
 - b) ledit article chaussant ayant au plus la moitié de la longueur du pied en partant des orteils.
13. Article chaussant selon la revendication 1, dans lequel ledit couvercle est relié en rotation à ladite base, et ledit couvercle complètement pour permettre la mise en place sans entraves du pied sous un séchoir.
14. Chaussure pouvant être portée avec la pièce rapportée selon la revendication 4 ou 5, ou en combinaison avec la pièce rapportée selon la revendication 4 ou 5, la chaussure comprenant :

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- a) une semelle extérieure constituée d'un matériau flexible ;
- b) une semelle intérieure souple ;
- c) un corps constitué d'un matériau semi-rigide souple pour le maintien de la forme et pour assurer flexibilité et confort ; et
- d) une partie supérieure détachable attachée audit corps, ou ladite semelle étant fixée avec un dispositif de fermeture.

15. Chaussure et pièce rapportée selon la revendication 14, dans lesquelles :

- a) ledit dispositif de fermeture est une fermeture éclair ou un type d'adhésif d'un matériau ;
- b) ladite partie supérieure s'ouvre complètement pour permettre la mise en place du pied avec ladite pièce rapportée attachée à l'intérieur de ladite chaussure directement par le dessus ou par le côté sans faire glisser le pied vers l'avant comme dans les chaussures classiques ;
- c) ladite partie supérieure et ledit dispositif de fermeture permettent que la chaussure puisse fixer complètement le pied et que la pièce rapportée facilite et maintienne diverses foulées et vitesses de marche ;
- d) ladite partie supérieure est entièrement amovible pour exposer le pied et ladite pièce rapportée ;
- e) ladite partie supérieure peut être de nouveau attachée à ladite chaussure pour fixer le pied et ladite pièce rapportée ; ou
- f) ladite partie supérieure est entièrement amovible pour exposer le pied et ladite pièce rapportée, et permettre l'ouverture complète du couvercle supérieur de ladite pièce rapportée.

FIG. 1

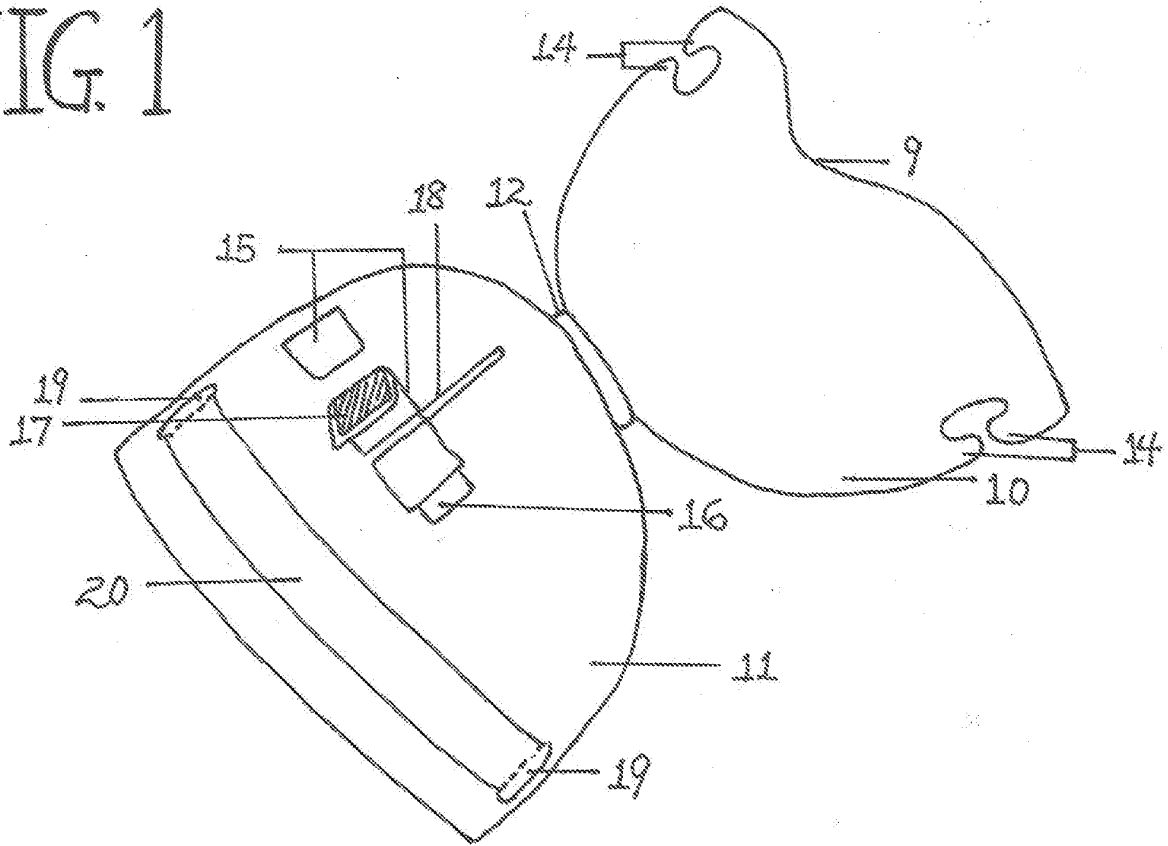


FIG. 2

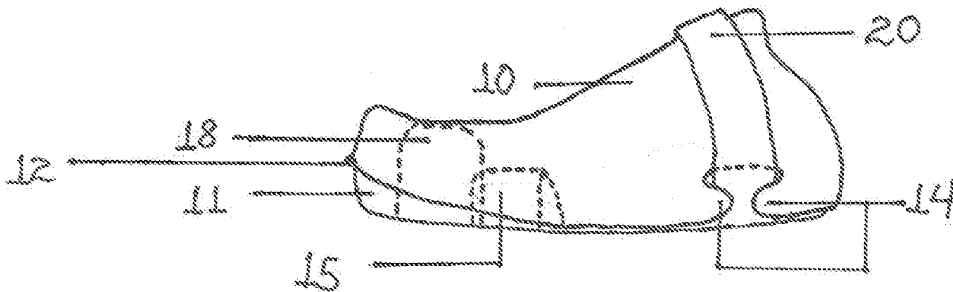


FIG. 3

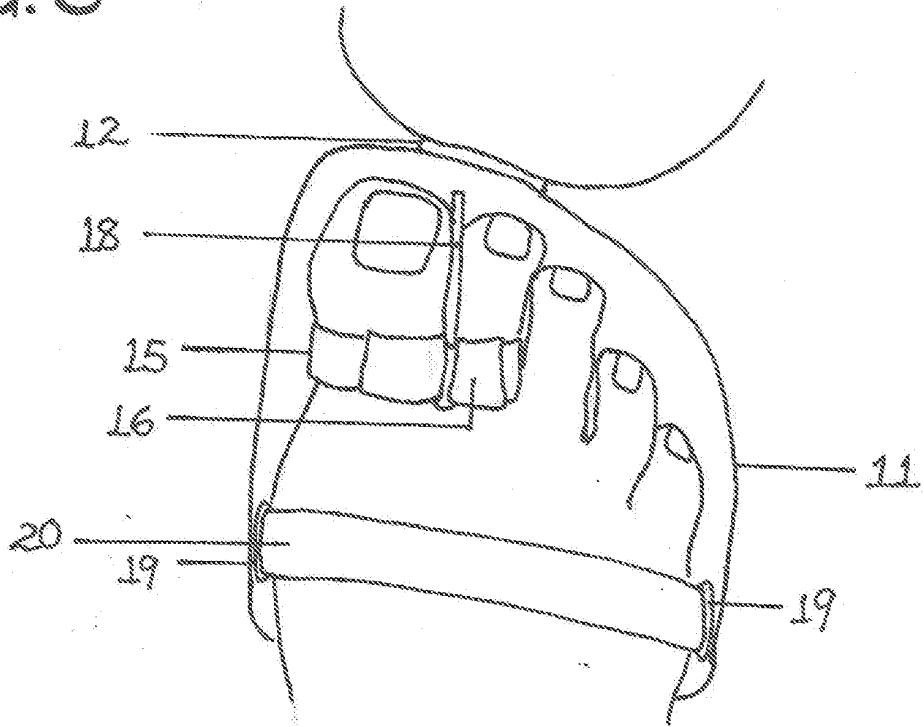


FIG. 4

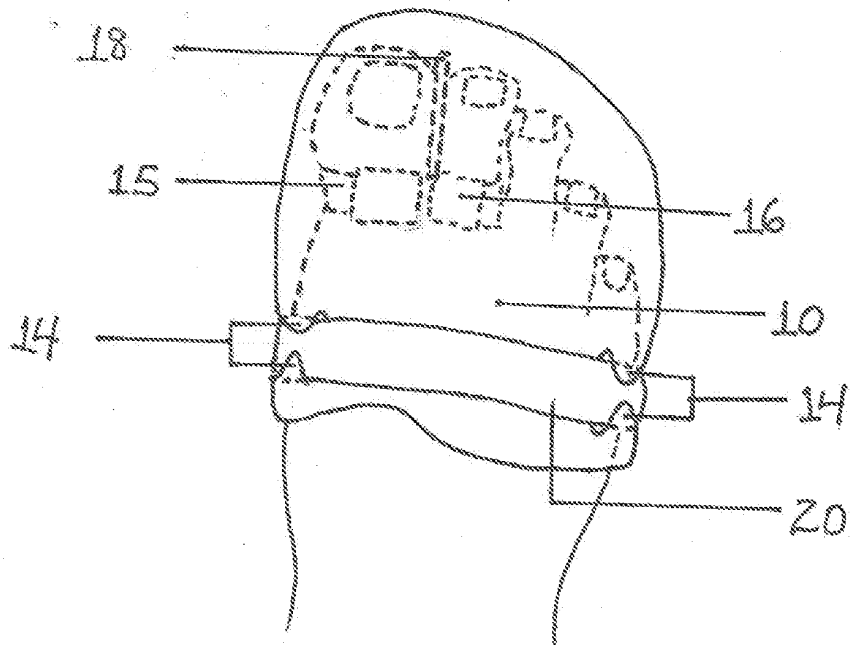


FIG. 5

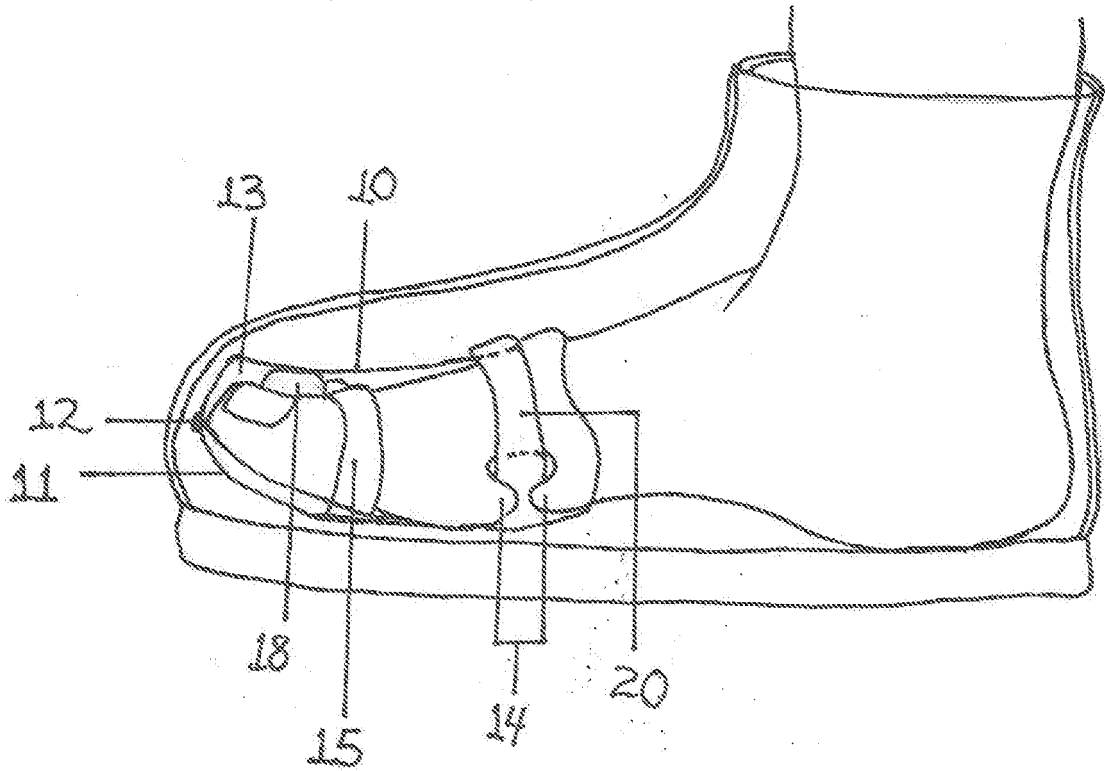


FIG. 6

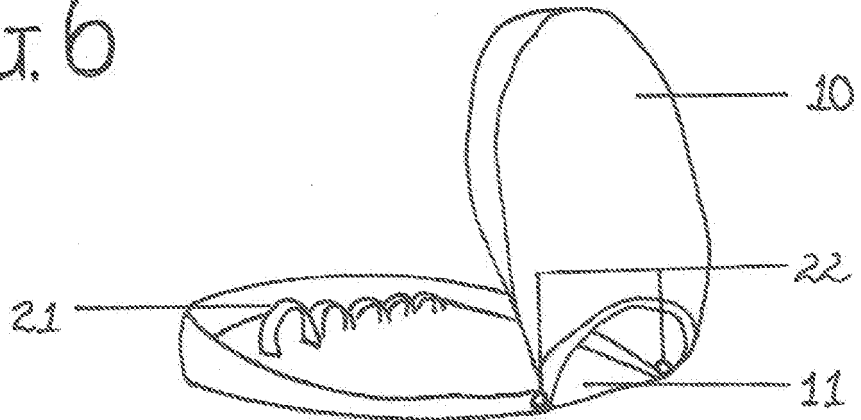


FIG. 7

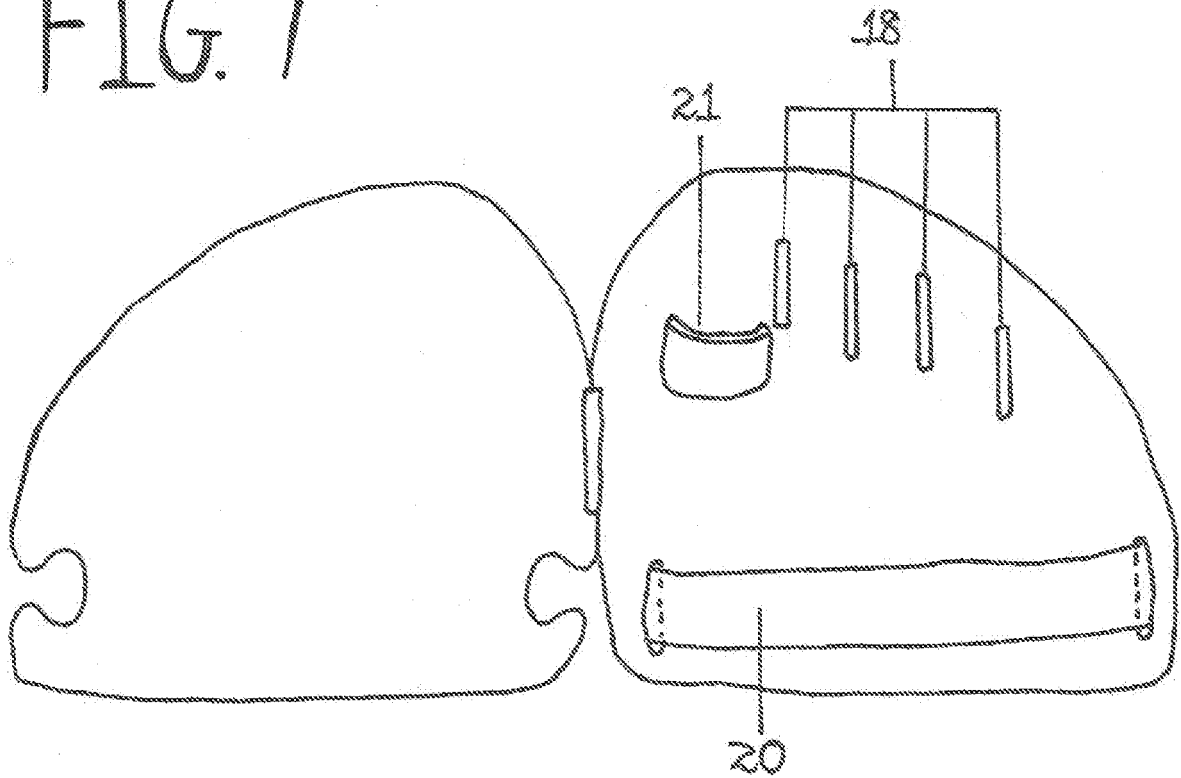


FIG. 8

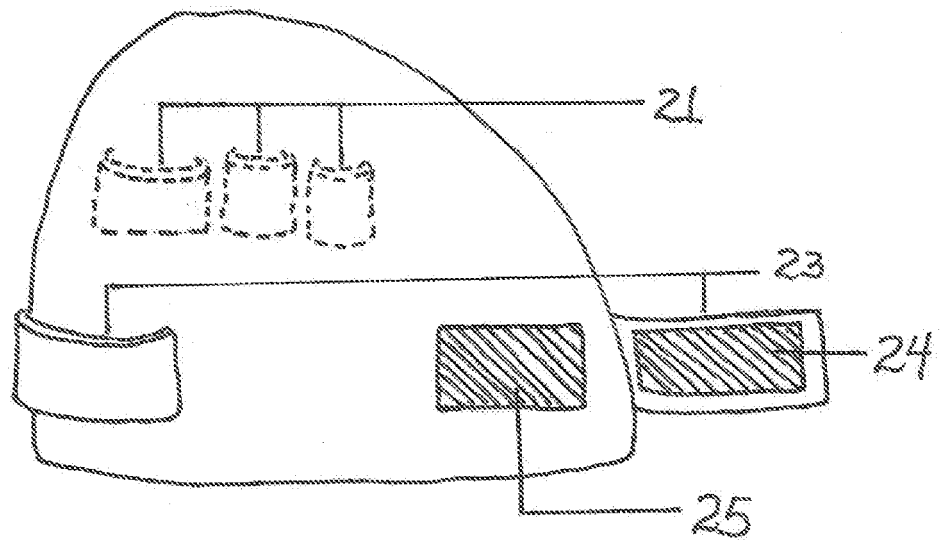


FIG. 9

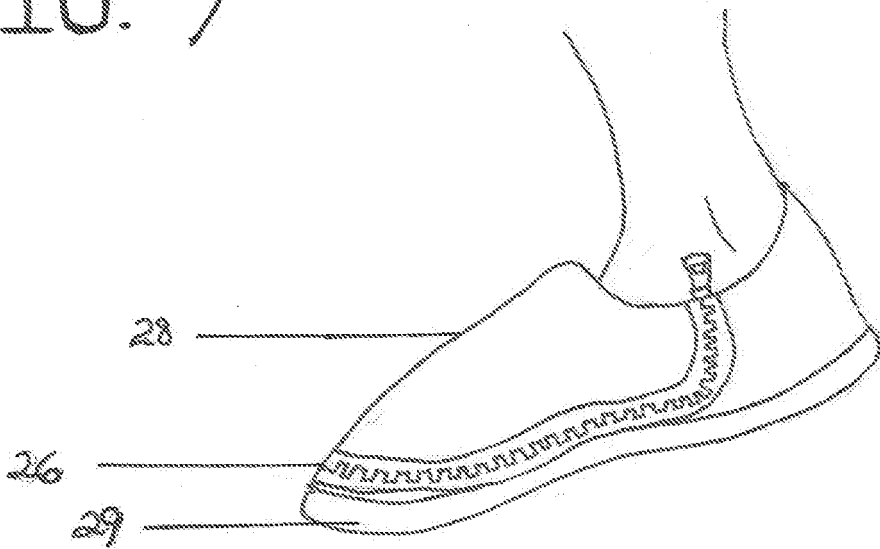
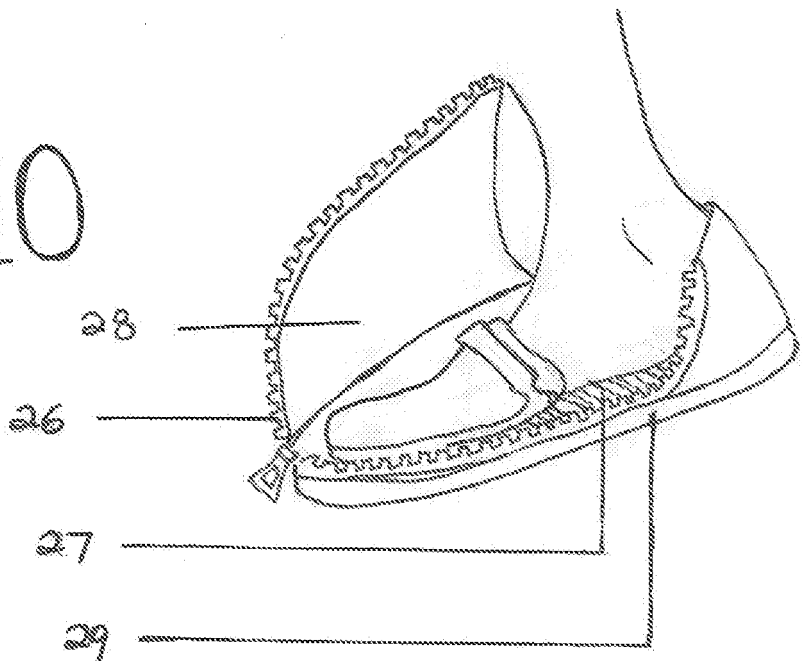


FIG. 10



REFERENCES CITED IN THE DESCRIPTION

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