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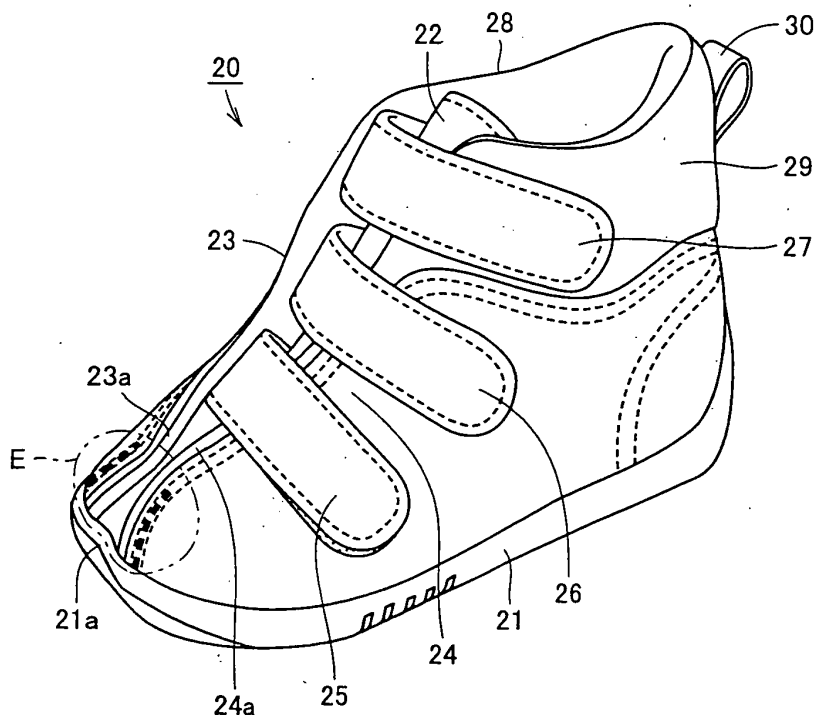
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Baby shoe

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A baby shoe (20) comprises a sole part (21) positioned under the baby foot, a tongue part (22) covering the baby instep, a first side coat part (23) covering one side face of the baby foot and partially overlapping with the tongue part (22), and a second side coat part (24) covering the other side face of the baby foot and partially overlapping with the tongue part (22). A front end of the tongue part (22) is connected to a front end (21a) of the sole part (21). The first and the second side coat parts (23, 24) have edge parts (23a, 24a), respectively which are opposed to each other over the tongue part (22) and extend to the front end (21a) of the sole part (21). In each of the edge parts of the first and the second side coat parts, its front part close to the front end of the sole part (21) is sewed on the tongue part (22).

FIG. 3



Description

BACKGROUND OF THE INVENTION

Field of the Invention

[0001] The present invention relates to a baby shoe and more particularly, it relates to a baby-friendly baby shoe.

Description of the Background Art

[0002] Baby shoes are used from an early stage of walking of a baby, which is for the purpose of protecting feet of the baby.

[0003] It is said that a foot of a child starts to grow from about one year old when a baby starts to walk until six or seven years old. Especially, it is important to develop the foot in a healthy manner in a relatively early stage of growth.

[0004] Fig. 1 shows a baby shoe for a toddling baby disclosed in Japanese Unexamined Patent Publication No. 47-8680. An illustrated baby shoe 1 comprises a sole part 2 positioned under the baby foot, a tongue part 3 covering the baby instep, a first side coat part 4 covering one side face of the baby foot and partially overlapping with the tongue part 3, and a second side coat part 5 covering the other side face of the baby foot and partially overlapping with the tongue part 3.

[0005] The first side coat part 4 and the second side coat part 5 each have edges opposed to each other over the tongue part 3, and holes through which a shoelace passes are provided at the edges. The shoelace (not shown) passing through the holes connects the first side coat part 4 and the second side coat part 5 over the tongue part 3 to hold the foot of the baby.

[0006] In the case of the baby shoe shown in Fig. 1, the following problems have been pointed out, for example.

(1) The side coat part 4 and the tongue part 3 are sewed together in a region away from the toe of the shoe 1, which is shown by A in Fig. 1. When the foot of the baby is put into the shoe, the tongue part 3 is turned up forward. However, it cannot be turned up at a part positioned ahead of the region A. Therefore, an opening through which the foot is inserted cannot be largely opened. Since the baby foot is flexible and soft, when the foot is inserted into the shoe through the opening which is not large enough, the baby could feel pain at that time.

(2) An uneven part appears because of overlapping of the side coat part 4 and the tongue part 3 and also a seam of them appears. The uneven part and the seam part are positioned at a place corresponding to the top of the metatarsal bone of the baby. Since the baby foot is soft and fat, a width of the foot widens when the weight is put thereon in walk-

ing. Especially, the top of the metatarsal bone is a part which widens most of all when the baby puts the weight on the foot in walking. In the case of the baby shoe shown in Fig. 1, since the uneven part and the seam part about on the widening part of the foot, the soft baby foot could be damaged.

(3) The soft instep of the baby widens when the weight is put thereon and heightens when the foot is in the air. In walking, the state the weight is put on the foot on the ground and the state the foot is in the air are repeated. Therefore, when the part of the instep is strongly pressed at the tongue part 3 from above by strongly fastening the first side coat part 4 and the second side coat part 5 with the shoelace, the instep is pressed hard in walking.

(4) In the case of the shoe shown in Fig. 1, the first side coat part 4 and the second side coat part 5 have a height extending close to the ankle of the baby putting on the shoe 1. Since the ankle of the toddling baby is shaky especially, it is necessary to hold the ankle stably by fastening the shoelace tight. However, when the ankle is held stably, since the first side coat part 4 and the second side coat part 5 press the anklebone of the baby strongly, the baby feels pain at the anklebone. In addition, when the anklebone is fastened strongly, the smooth movement of the ankle is hindered.

SUMMARY OF THE INVENTION

[0007] It is an object of the present invention to provide a baby shoe devised so as not to damage a soft baby foot.

[0008] The present invention provides a baby shoe comprising a sole part positioned under the baby foot, a tongue part covering the baby instep, a first side coat part covering one side face of the baby foot and partially overlapping with the tongue part, and a second side coat part covering the other side face of the baby foot and partially overlapping with the tongue part 22, and it is characterized by the following points.

[0009] That is, a front end of the tongue part is connected to a front end of the sole part. The first and the second side coat parts each have edges which are opposed to each other over the tongue part. Each of the edge parts of the first and the second side coat parts is positioned over the tongue part and extends to the front end of the sole part. In each of the edge parts of the first and the second side coat parts, its front part close to the front end of the sole part is sewed on the tongue part.

[0010] Preferably, seams of the edges of the first and the second side coat parts, and the tongue part are positioned over the toes of the baby putting on the shoe.

[0011] According to one embodiment, there is provided a connection band connecting the edge of the first side coat part and the edge of the second side coat part. The connection band has one end connected to an inner face of the first side coat part and the other end detach-

ably connected to an outer face of the second side coat part.

[0012] There may be a plurality of connection bands. More specifically, the baby shoe comprises a first, a second and a third connection bands connecting the edge of the first side coat part and the edge of the second side coat part. The first connection band is positioned apart from the ankle, the third connection band is positioned closest to the ankle and the second connection band is positioned in the middle. Each of the first, second and third connection bands has one end connected to an inner face of the first side coat part and the other end detachably connected to an outer face of the second side coat part.

[0013] According to another embodiment, a baby shoe comprises a first and a second connection bands connecting the edge of the first side coat part and the edge of the second side coat part. The first connection band is positioned apart from the ankle and has one end connected to an inner face of the first side coat part and the other end detachably connected to an outer face of the second side coat part. The second connection band is positioned close to the ankle and has one end connected to the inner face of the first side coat part and the other end detachably connected to the outer face of the second side coat part.

[0014] Preferably, means for detachably connecting the other end of the connection band and the outer face of the second side coat part is a surface fastener.

[0015] Preferably, a grip band picked with fingers is attached to a back face part of the baby shoe. The grip band has a lower end fixed to the shoe and an unfixed grip part length is 2cm or more. According to one embodiment, a height of an upper end of the grip band is the same as a height of an upper end of the baby shoe or less.

[0016] A meritorious effect of above each component is described in a section of the description of the embodiments.

BRIEF DESCRIPTION OF THE DRAWINGS

[0017]

Fig. 1 is a perspective view showing an example of the conventional baby shoe;

Fig. 2 is an anatomical drawing of the bone of the foot;

Fig. 3 is a perspective view showing an embodiment of the present invention;

Fig. 4 is a front view showing a baby shoe in Fig. 3;

Fig. 5 is a side view showing a baby shoe in Fig. 3;

Fig. 6 is a perspective view showing an open state of the baby shoe in Fig. 3;

Fig. 7 is a perspective view showing another embodiment of the present invention;

Fig. 8 is a front view showing a baby shoe in Fig. 7; and

Fig. 9 is a perspective view showing an open state of the baby shoe in Fig. 7.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0018] Fig. 2 is an anatomical drawing of the bone of the foot. The bone of the foot mainly consists of three regions such as a phalanx (toe bone) region B, a metatarsal region C and a tarsal region D. A metatarsal arch 10 at the front of the foot is a so called instep arch which is not a real arch and changes when stress is applied. In a case of an adult, the metatarsal arch 10 disappears in walking by weight. A lateral arch 11 at the tarsal does not change by weight in the case of the adult.

[0019] Since the foot of a baby is soft and fat, the shape of the foot changes when the weight is put on the foot on the ground and when the foot leaves the ground. When the weight is put on the foot, a width of the foot is increased and a height of the instep is decreased. In the meantime, when the foot leaves the ground and it is in the air, the width of the foot is decreased and the height of the instep is increased.

[0020] The baby bends the toes to catch the ground while standing. To promote this motion leads to shaping of the arc of the foot. In order to smoothly perform this motion by the toes, it is necessary to stably hold the metatarsal arch 10. Since the metatarsal arch 10 does not limit the movement of the toes, the movement of the toes is not hindered even if it is stably fixed.

[0021] The region of the lateral tarsal arch 11 decides the height of the instep and in the case of the baby, it heightens when the weight is not put on. Therefore, this part should not be held tight.

[0022] Since the skin of the baby is soft, it is likely to be damaged by roughness or rubbing. In addition, in the case of the baby who just begins walking, since the ankle is shaky, it is necessary to stably hold the ankle in order to promote the smooth walking.

[0023] The present invention was made in view of the above-described foot structure peculiar to the baby and provides a baby shoe devised so as not to damage the soft baby foot.

[0024] Figs. 3 through 6 show an embodiment of the present invention. Fig. 3 is a perspective view, Fig. 4 is a front view, Fig. 5 is a side view and Fig. 6 is a perspective view showing a state in which an opening for inserting the foot is widely open.

[0025] An illustrated baby shoe 20 comprises a sole part 21 positioned under the baby foot, a tongue part 22 covering the baby instep, a first side coat part 23 covering one side face of the baby foot and partially overlapping with the tongue part 22, and a second side coat part 24 covering the other side face of the baby foot and partially overlapping with the tongue part 22. The first and the second side coat parts 23 and 24 are continuously formed through a back face of the shoe 20.

[0026] A front end of the tongue part 22 is connected

to a front end 21a of the sole part 21. The first and the second side coat parts 23 and 24 have edge parts 23a and 24a, respectively which are opposed to each other over the tongue part 22. As shown in the drawings, the edge parts 23a and 24a of the first and the second side coat parts 23 and 24 extend to the front end 21a of the sole part 21 while positioned over the tongue part 22.

[0027] In each of the edge parts 23a and 24a of the first and the second side coat parts 23 and 24, its front part close to the front end 21a of the sole part 21 is sewed on the tongue part 22. In Figs. 3 through 6, a part shown by E is a part in which each of the side coat parts 23 and 24 is sewed on the tongue part 22.

[0028] There are an uneven part because of the overlapping of each of the side coat parts 23 and 24 and the tongue part 22, and a seam part between them, inside the baby shoe 20. Although the uneven part and the seam part are positioned at the top of the metatarsal bone of the baby in the conventional baby shoe shown in Fig. 1, according to the baby shoe in this embodiment of the present invention, the uneven part and the seam part E are positioned over the toes of the baby. According to this embodiment of the present invention, even when the weight is put on the foot of the baby, since the uneven or the seam part E does not rub on the toes, the baby foot is not damaged.

[0029] Furthermore, as shown in Fig. 6, according to this embodiment of the present invention, since the edge parts 23a and 24a of the first and the second side coat parts 23 and 24 extend to the front end of the sole part 21 and sewed on the tongue part 22 at a region close to this front end, the tongue part 22 can be largely turned up to near the front end of the sole part 21. Therefore, since the opening for inserting the foot can be largely opened, the soft baby foot can be easily put into the shoe.

[0030] Still further, when the tongue part 22 is turned up to near the front end 21a of the sole part 21, since the position of the toe bone of the baby in the shoe 20 can be confirmed, it is easy to determine whether a foot size of the growing baby fits a size of the shoe. Thus, according to this embodiment of the present invention, it is easy to find out time to renew shoes.

[0031] As can be clear from Figs. 3 through 6, the edge parts 23a and 24a of the first and the second side coat parts 23 and 24 positioned over the tongue part 22 are connected to each other through connection bands. In this case, one end of the connection band is fixed to an inner face of the first side coat part 23 and the other end thereof is detachably connected to an outer face of the second side coat part 24.

[0032] More specifically, the baby shoe 20 comprises a first connection band 25, a second connection band 26 and a third connection band 27 which connect the edge part 23a of the first side coat part 23 to the edge part 24a of the second side coat part 24. The first connection band 25 is positioned apart from the ankle, the third connection band 27 is positioned closest to the an-

kle and. the second connection band 26 is positioned in the middle. As shown in the drawings, each of the first, the second and the third connection bands 25, 26 and 27 has one end fixed to the inner face of the first side coat part 23 and the other end detachably connected to the outer face of the second side coat part 24.

[0033] Preferably, means for detachably connecting the other end of the connection band is a surface fastener 31. In the case of the surface fastener 31, the connection band can be easily connected and disconnected for a short time. Since its operation is very simple, even the baby can easily connect and disconnect the connection band.

[0034] According to this embodiment of the present invention, since one end of each of the connection bands 25, 26 and 27 is positioned in the inner face of the first side coat part 23 and the other end thereof is positioned in the outer surface of the second side coat part 24, it is easy to distinguish a right shoe from a left shoe. This distinction between the right and left shoes becomes an important element in a stage the baby grows up and puts on the shoes alone.

[0035] In addition, Figs. 3 through 6 show the shoe for the left foot and in each of the connection bands 25, 26 and 27, one end thereof positioned at the inner side of the foot is fixed to the inner face of the first side coat part 23 and the other end thereof positioned at the outer side of the foot is detachably connected to the outer face of the second side coat part 24. This relation is the same in the case of the shoe for the right foot although it is not shown.

[0036] Although the three connection bands 25, 26 and 27 have the same connecting forms in the illustrated embodiment, they may be differentiated. For example, in the case of the baby who just begins walking, since the ankle is shaky, it is necessary to stably hold the ankle. Therefore, with regard to the connection band 27 which is closest to the ankle, its one end is fixed to the outer face of the first side coat part 23 and the other end thereof is detachably connected to the outer face of the second side coat part 24. According to such connection band 27, since an upper end of the first side coat part 23 can be pulled tight, the ankle can be held stably. With regard to the rest of the two connection bands 25 and 26, one ends thereof are fixed to the inner face of the first side coat part 23, so that distinction between the right and left shoes can be easily made.

[0037] As clearly shown in Fig. 5, a grip band 30 to be picked with fingers is attached to the back face of the baby shoe 20. When a parent has the baby put on the shoe, a back part of the shoe 20 can be pulled up by picking this grip band 30. Although the baby shoe provided with this kind of grip band has been provided in the market conventionally, a length (width) of the grip part which is not fixed is small in general and it is sometimes difficult to pinch it. Thus, according to the embodiment of the present invention, in order to easily pinch it with fingers, the width of the grip band 30 (the length of

the grip part which is not fixed) is set at 2cm or more. In addition, in order not to spoil the designed beauty, an upper end of the grip band 30 is preferably the same as a height of an upper end of the baby shoe 20 or less.

[0038] In the case of the baby who is immature in walking, since the ankle is weak, it is desirable that the shoe can stably hold the ankle. According to the baby shoe 20 shown in Figs. 3 through 6, in order to hold the ankle of the baby, the first side coat part 23 and the second side coat part 24 have a height so that the ankle of the baby can be covered.

[0039] Meanwhile, the term "ankle" used in this specification means the thinnest part in the leg from the knee to the foot and the anklebone is positioned just under the ankle.

[0040] According to this embodiment of the present invention, the first connection band 25 is positioned over the metatarsal arch 10 (referring to Fig. 2) of the baby putting on the shoe 20 so as to hold the metatarsal arch 10 tight. The second connection band 26 is positioned over the lateral tarsal arch 11 (referring to Fig. 2) of the baby so as to fasten the lateral tarsal arch 11 gently.

[0041] When the first connection band 25 is fasten tight to hold the metatarsal arch 10 stably, since the baby can smoothly move the toes to catch the ground, the formation of the arch of the foot can be promoted.

[0042] As described above, the region of the lateral tarsal arch 11 is a part in which the height of the instep is determined. Since the baby foot is flexible and fat, it laterally widens when the weight is put on the foot while the height of the instep is increased when the weight is not put on the foot. Since the configuration of the foot repeatedly changes as described above while walking, the lateral tarsal arch 11 should not be fastened tight. Meanwhile, when the lateral tarsal arch 11 is not held at all, the foot shifts in the shoe and the walking is hindered. Thus, it is necessary to hold the lateral tarsal arch 11 by the connection band 26 to some extent.

[0043] Preferably, the connection band 26 positioned over the lateral tarsal arch 11 is constituted such that the lateral tarsal arch 11 is to be fastened only gently. For example, the following structures can be considered.

(1) By appropriately selecting the position of the surface fastener 31, the lateral tarsal arch 11 can be fastened only gently when connected.

(2) In the case the position of the surface fastener is set at the same position as the other connection bands 25 and 27, the lateral tarsal arch 11 is to be fastened only gently by increasing the length of the second connection band 26.

(3) The second connection band 26 is widened and an opening is provided at a part just above the lateral tarsal arch 11 so that the lateral tarsal arch 11 may not be pressed hard.

(4) The second connection band 26 is formed of a relatively hard material so as to be convexly curved

so that the lateral tarsal arch 11 may not be pressed hard.

[0044] In the case of the baby shoe 20 shown in Figs. 3 through 6, the third connection band 27 connects the edge part 23a of the first side coat part 23 to the edge part 24a of the second side coat part 24 at the part of the ankle of the baby. In the case of the baby who is immature in walking, since the ankle is shaky, it is necessary to stably hold the ankle. Thus, the third connection band 27 is provided so as to be able to hold the ankle of the baby stably. In order to increase fastening force of the third connection band 27 around the ankle, unlike the illustrated embodiment, one end of the third connection band 27 may be fixed to the outer face of the first side coat part 23.

[0045] The first side coat part 23 and the second side coat part 24 have a height so that the ankle of the baby may be covered. Therefore, when the third connection band 27 is fastened tight to hold the ankle stably, the first and the second side coat parts 23 and 24 abut on the anklebone of the baby. Since the walking movement of the baby sways more than that of the adult, if the side coat part of the shoe presses hard the anklebone of the baby who just begins walking, the anklebone could be damaged and the walking is hindered.

[0046] Thus, according to this embodiment of the present invention, the first and the second side coat parts 23 and 24 have soft cushion materials 28 and 29, respectively which cover the anklebone of the baby putting on the shoe 20. Each of the cushion materials 28 and 29 has a width dimension in which a lower end 29a (referring to Fig. 5) thereof is positioned under the anklebone of the baby and an upper end thereof is positioned at the height of the anklebone of the baby.

[0047] When each of the cushion materials 28 and 29 has the above width dimension, since the anklebone of the baby can be completely covered with the soft cushion materials, the anklebone is not damaged and the walking is not hindered.

[0048] According to the illustrated embodiment, the cushion materials 28 and 29 are continuously formed in a whole upper end region of the first and the second side coat parts 23 and 24. In addition, the above-described third connection band 27 connects the cushion material 28 of the first side coat part 23 to the cushion material 29 of the second side coat part 29 over the tongue part 22.

[0049] In addition, in order to completely cover the anklebone, as shown in Fig. 5, it is preferable that a part positioned under the anklebone in the lower edge 29a of the cushion material is convexly curved downward.

[0050] Some of the conventional baby shoe have a cushion material positioned over the anklebone. However, since a width dimension of the cushion material is small, it seems that the anklebone is not completely covered. According to this embodiment of the present invention, in order to completely cover the anklebone,

when it assumed that a height of the first and the second side coat parts in the region corresponding to the ankle-bone of the baby is H, the width dimension of the cushion material 29 in this region is preferably set at H/3 or more.

[0051] Figs. 7 through 9 show another embodiment of the present invention. An illustrated baby shoe 40 comprises a sole part 41, a tongue part 42, a first side coat part 43, and a second side coat part 44, a seam region E, a first connection band 45, a second connection band 46, cushion materials 47 and 48, and a grip band 49. Unlike the embodiment shown in Figs. 3 through 6, the illustrated baby shoe 40 has only two connection bands 45 and 46. With regard to other components, there is no substantial difference.

[0052] The first connection band 45 is positioned over the metatarsal arch 10 (referring to Fig. 2) of the baby and provided so as to be able to stably hold the metatarsal arch 10. The second band 46 is positioned over the lateral tarsal arch 11 of the baby and provided so as to fasten the lateral tarsal arch gently.

[0053] Since the ankle is weak until the toddling baby masters how to walk, the baby shoe 20 shown in Figs. 3 through 6 is preferable. In the meantime, at a stage where the baby has got used to walking, since the ankle is stable, it is not necessary to hold the ankle. At this stage, the baby shoe 40 shown in Figs. 7 through 9 can be used:

[0054] Although the present invention was described with reference to the drawings above, the present invention is not limited to the illustrated embodiments only. Various modifications and variations can be added in the same or an equivalent range of the present invention.

Claims

1. A baby shoe (20) comprising a sole part (21) positioned under the baby foot, a tongue part (22) covering the baby instep, a first side coat part (23) covering one side face of the baby foot and partially overlapping with the tongue part (22), and a second side coat part (24) covering the other side face of the baby foot and partially overlapping with the tongue part (22),
 wherein a front end of said tongue part (22) is connected to a front end (21a) of said sole part (21),
 said first and second side coat parts (23, 24) each have edge parts (23a, 24a) which are opposed to each other over said tongue part (22),
 each of the edge parts of said first and second side coat parts (23, 24) is positioned over said tongue part (22) and extends to the front end of said sole part (21), and
 in each of the edge parts of the first and the second side coat parts (23, 24), its front part close to the front end of said sole part (21) is sewed on said tongue part (22).
2. The baby shoe according to claim 1, wherein seams of the edges of said first and second side coat parts (23, 24), and said tongue part (22) are positioned over the toes of the baby putting on the shoe.
3. The baby shoe according to claim 1 or 2, comprising a connection band (25) connecting the edge of said first side coat part (23) and the edge of the second side coat part (24),
 wherein said connection band (25) has one end connected to an inner face of said first side coat part (23) and the other end detachably connected to an outer face of said second side coat part (24).
4. The baby shoe according to claim 1 or 2, comprising a first, a second and a third connection bands (25, 26, 27) connecting the edge of said first side coat part (23) and the edge of the second side coat part (24),
 wherein said first connection band (25) is positioned apart from the ankle, said third connection band (27) is positioned closest to the ankle and said second connection band (26) is positioned in the middle, and
 each of said first, second and third connection bands (25, 26, 27) has one end connected to an inner face of said first side coat part (23) and the other end detachably connected to an outer face of said second side coat part (24).
5. The baby shoe according to claim 1 or 2, comprising a first and a second connection bands (45, 46) connecting the edge of said first side coat part (43) and the edge of the second side coat part (44),
 wherein said first connection band (45) is positioned apart from the ankle and has one end connected to an inner face of said first side coat part (43) and the other end detachably connected to an outer face of said second side coat part (44), and
 said second connection band (46) is positioned close to the ankle and has one end connected to the inner face of said first side coat part (43) and the other end detachably connected to the outer face of said second side coat part (44).
6. The baby shoe according to any one of claims 3 through 5, wherein means for detachably connecting the other end of said connection band and the outer face of said second side coat part is a surface fastener (31).
7. The baby shoe according to any one of claims 1 through 6, wherein a grip band (30) picked with fingers is attached to a back face part of the baby shoe, and
 said grip band (30) has a lower end fixed to the shoe and an unfixed grip part length is 2cm or more.

8. The baby shoe according to claim 7, wherein a height of an upper end of said grip band (30) is the same as a height of an upper end of the baby shoe or less.

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FIG. 1 PRIOR ART

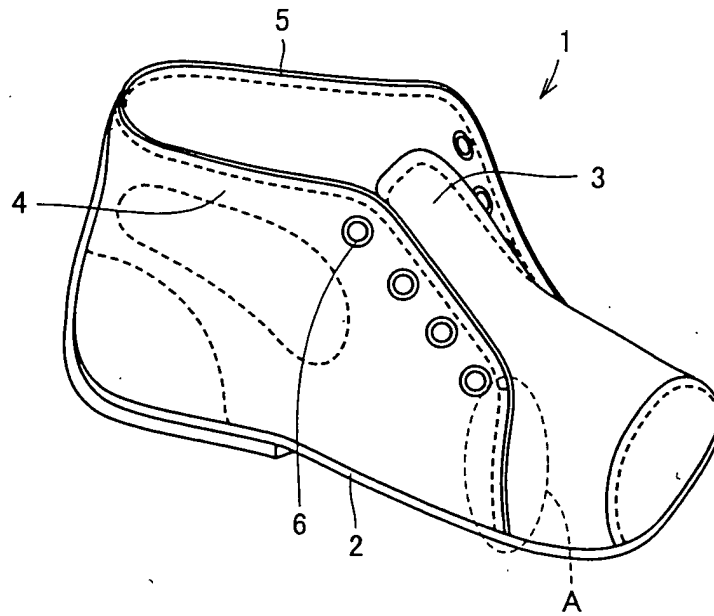


FIG. 2

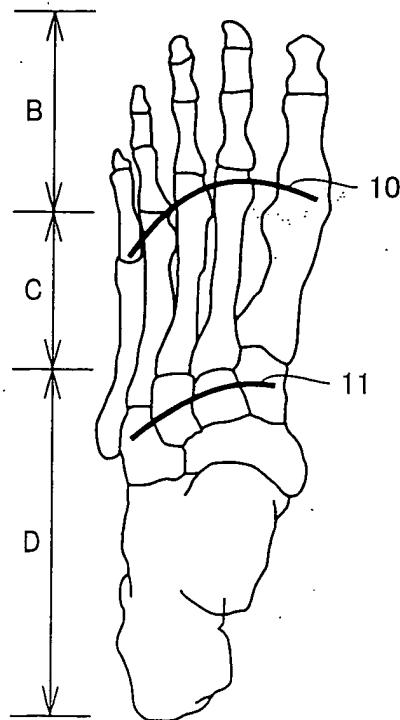


FIG. 3

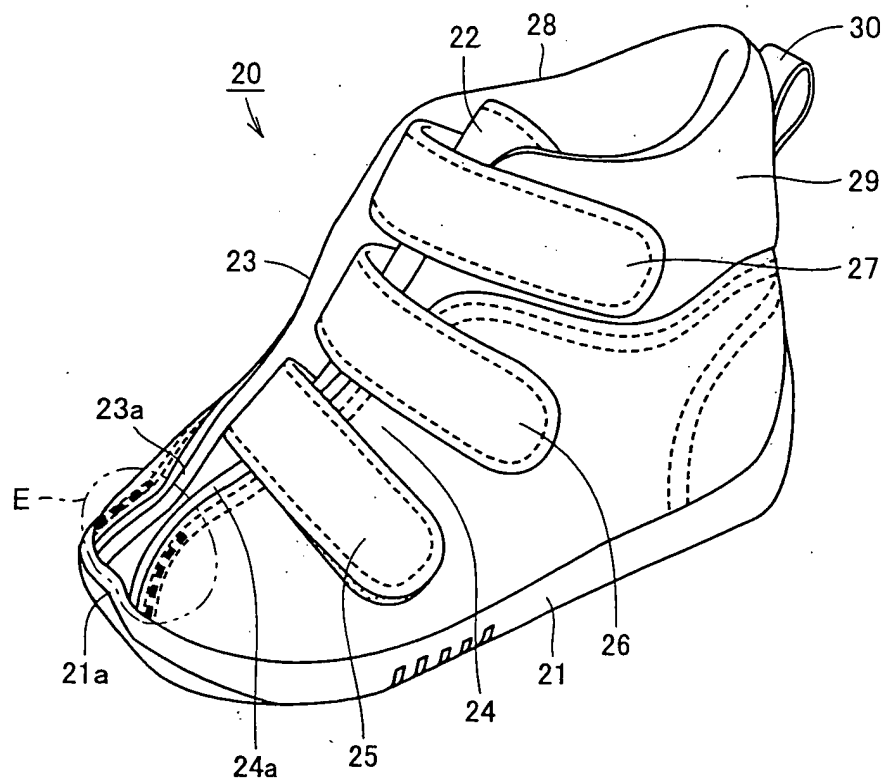


FIG. 4

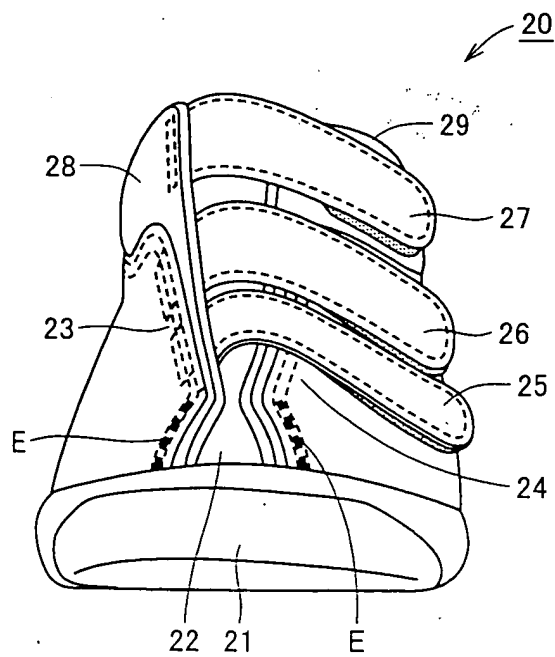


FIG. 5

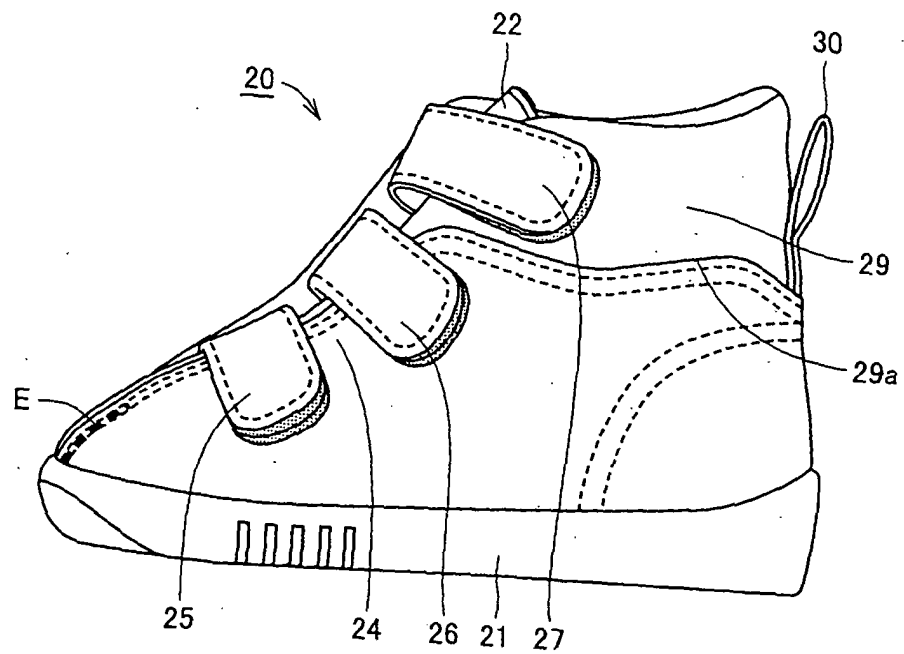


FIG. 6

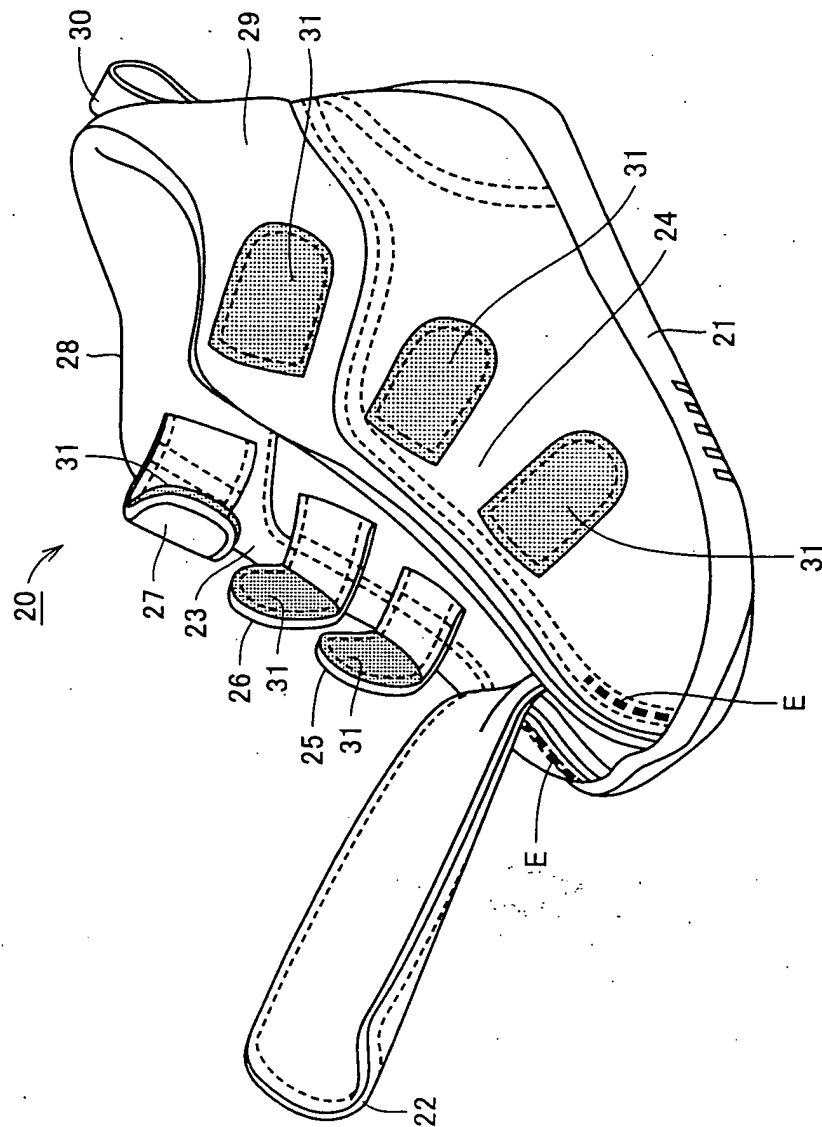


FIG. 7

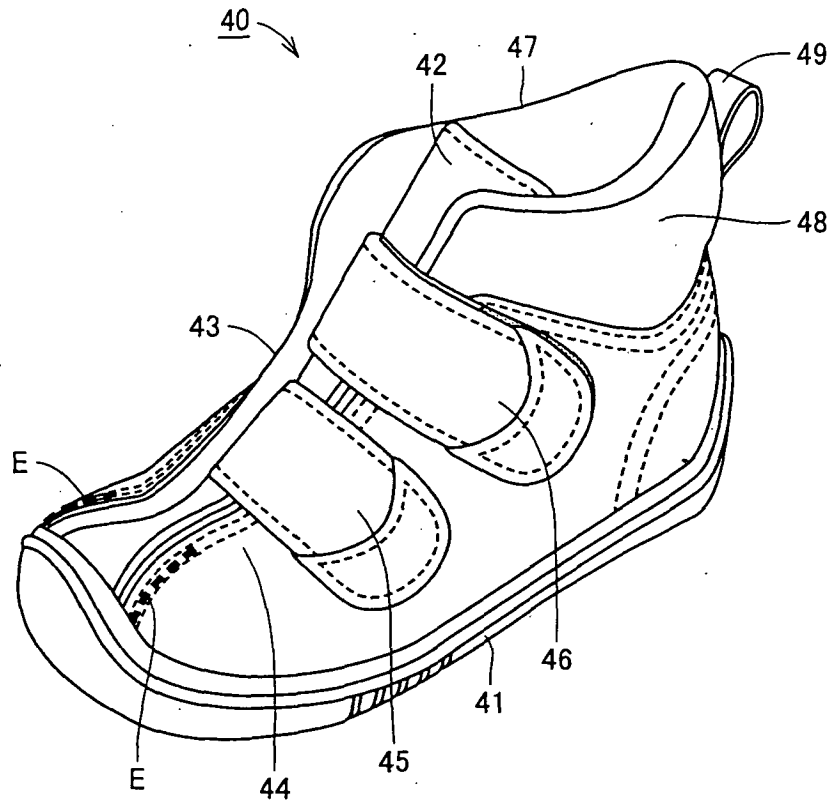


FIG. 8

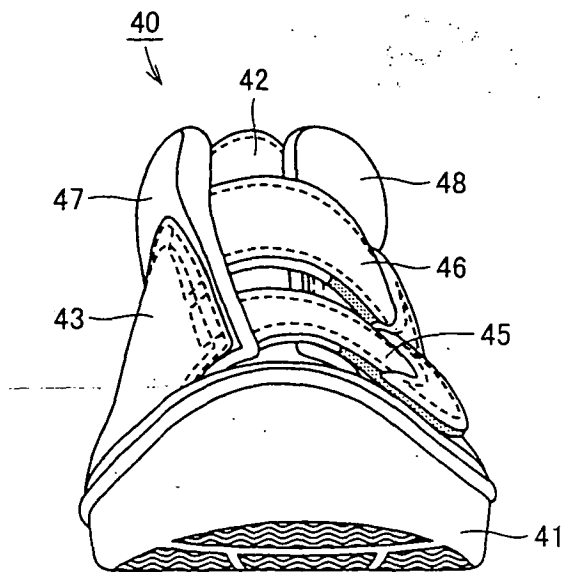
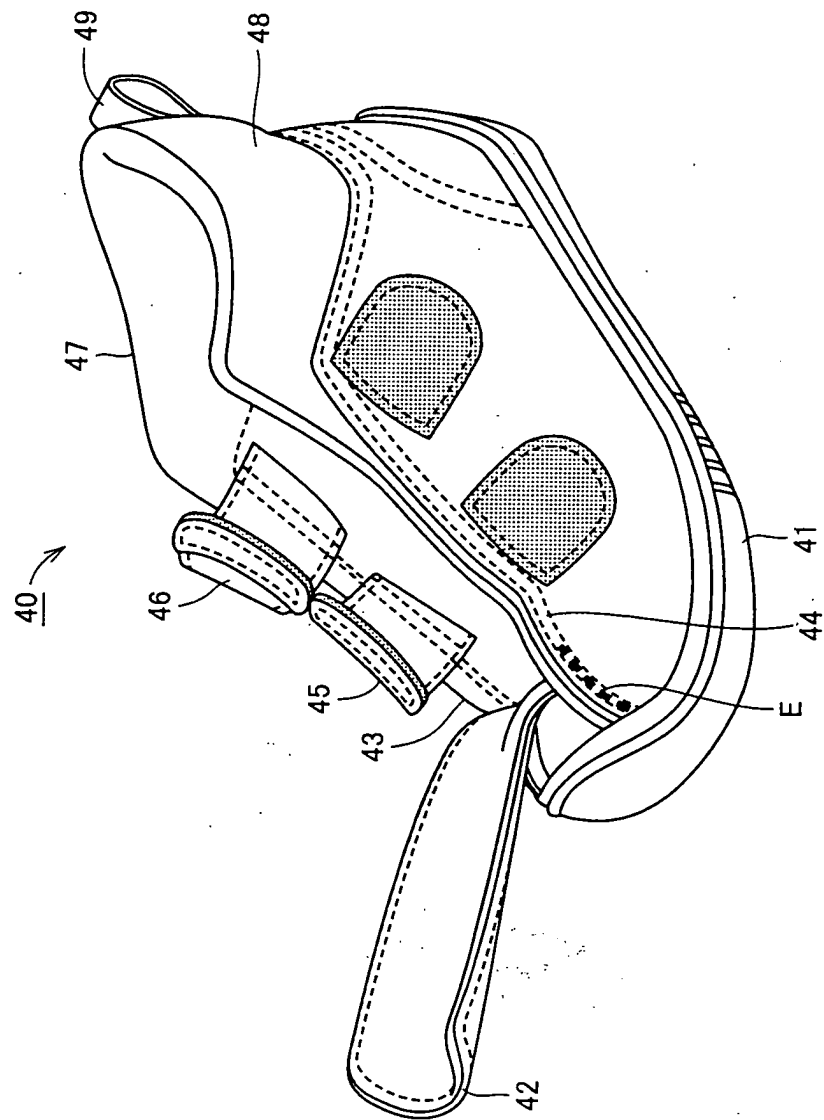


FIG. 9





European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 04 00 4529

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	US 4 724 623 A (SILVERMAN JEFFREY) 16 February 1988 (1988-02-16)	1-3,6	A43B3/30 A43B11/00 A43C11/14
Y	* column 3, line 60 - column 4, line 31; figures 5-7 *	4,5	
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