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(54) **TOE INSERTION SHOES WITH INTEGRATED OUTSOLE**

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(57) **ABSTRACT**

Disclosed is a toe insertion shoe with an integrated outsole, which includes an upper including toe insertion parts, in each of which at least one toe of a user is independently seated, the toe insertion parts being formed by dividing a front part of the upper, an outsole coupled with a lower part of the upper while supporting all the lower part of the upper including the toe insertion parts, the outsole having an integrally formed part coupled with the toe insertion parts without separation according to a separated shape of the toe insertion parts, and a cover for covering an entire or a part of the toe insertion parts.

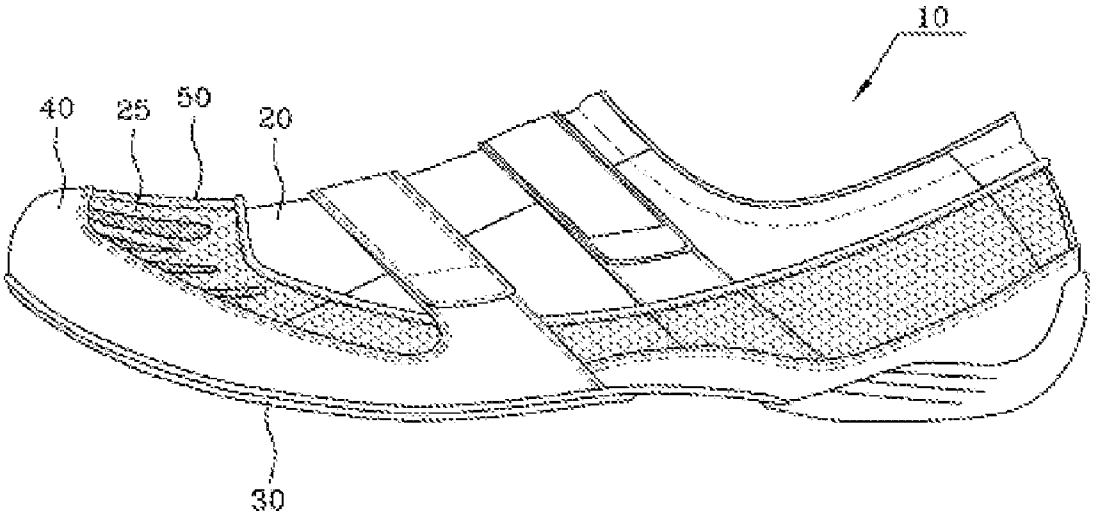


Fig.1

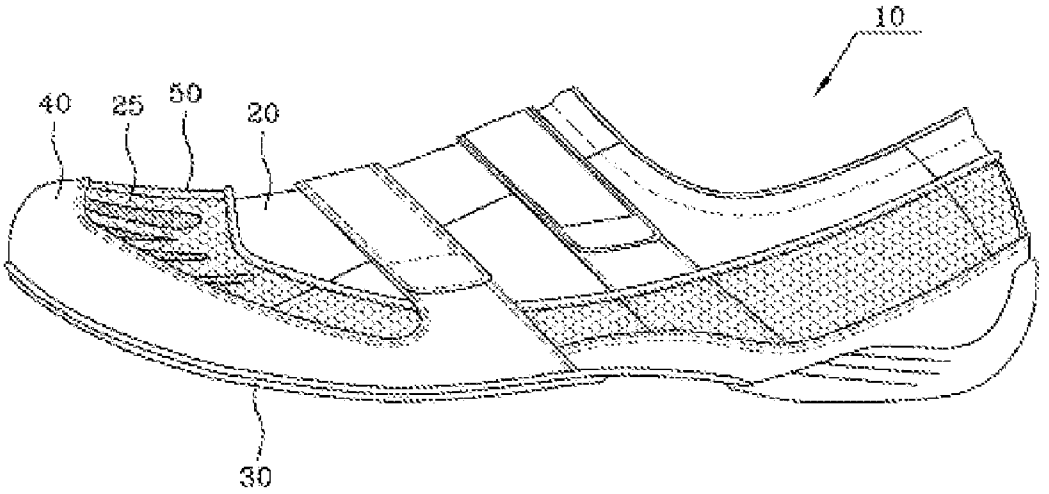


Fig.2

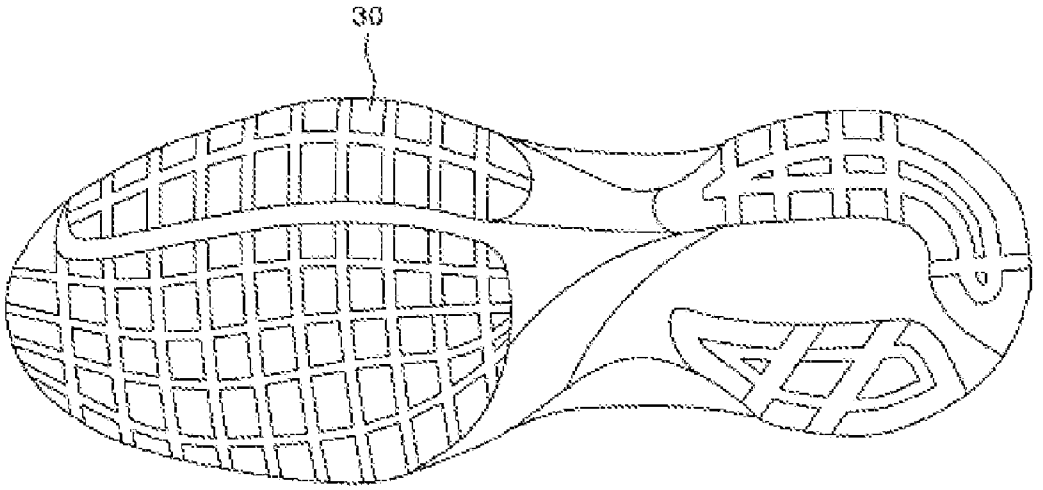


Fig.3

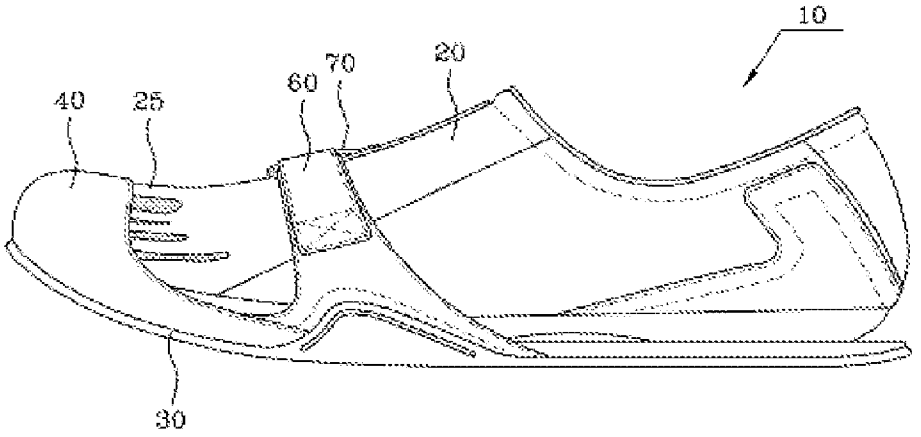


Fig.4

Prior Art

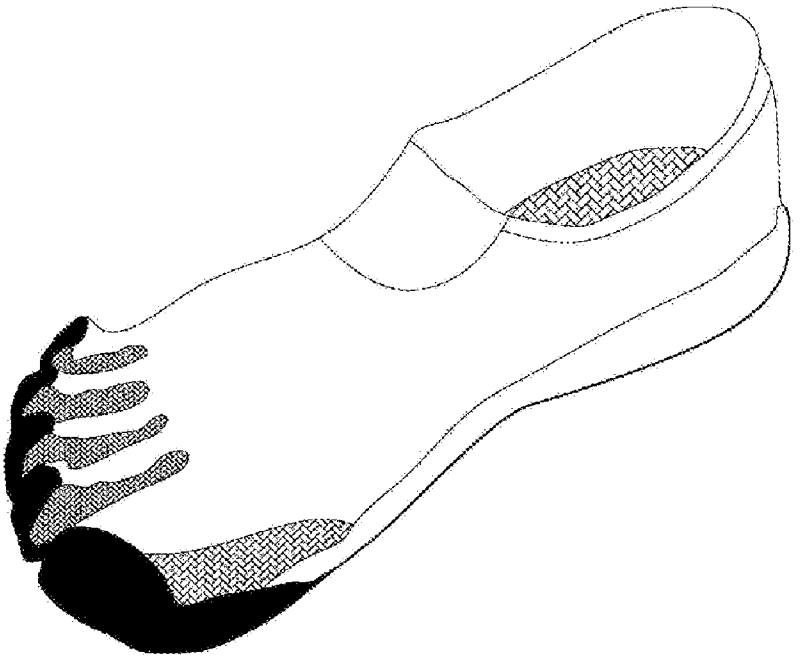
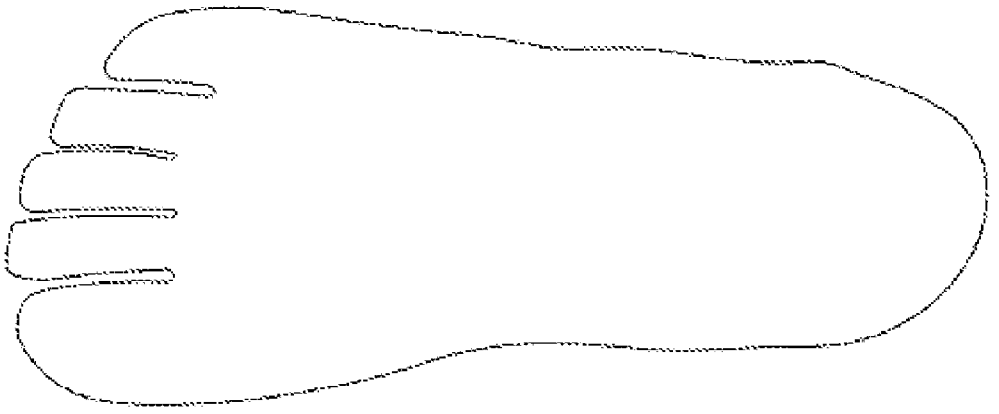


Fig.5

Prior Art



TOE INSERTION SHOES WITH INTEGRATED OUTSOLE

TECHNICAL FIELD

[0001] The present invention relates to toe insertion shoes with an integrated outsole. More particularly, the present invention relates to toe insertion shoes with an integrated outsole which include uppers formed with toe insertion parts configured by dividing a front end part of the shoes into at least two parts in order for at least one toe of a user to be independently laid, an outsole assembled with a lower part of the uppers while receiving both the lower part of the uppers including the toe insertion parts and integrally formed with a part that is assembled with the toe insertion parts without separation according to a separated shape of the toe insertion parts, and a cover for covering an entire or a part of the toe insertion parts.

BACKGROUND ART

[0002] People who walk upright spend a large amount of time on their feet and wearing shoes, such as sneakers or heeled shoes, except for the time of sleeping and relaxing. Shoes were initially conceived for protecting the feet that are basic means for upright walking, but have been now more emphasized in the aspect of an article of fashion comparable to clothing.

[0003] In this respect, the shoes with a design focusing on beauty have been preferred, and such a trend is strongly noticeable in the shoes for women. The representative trend shows shoes having a narrow foot and sharp front side, high heels, and platform shoes. Such shoes may look beautiful, but are made in a different shape from the original foot shape, thereby causing various foot diseases.

[0004] In the meantime, the advanced and high-tech shoes having a function of enhancing health and concentration by stimulating the feet and stimulating an epiphyseal plate have been continuously developed. According to the trend, Korean Utility Model application No. 20-2006-0024914 and Korean Patent Registration No. 10-0869451 disclose toe insertion shoes in which a forefoot part of a shoe is divided into 5 toe insertion parts in order for the 5 toes to be independently laid according to the shape of the foot.

[0005] The above toe insertion shoes in which a forefoot part of uppers is divided into 5 parts according to the shape of the toes to form 5 toe insertion parts and an outsole separately formed according to a shape of each of the separated toe insertion parts is attached to a bottom of the uppers has a problem in that sharp objects, such as a piece of glass or a nail, can be inserted between each of the toe insertion parts to penetrate into an lateral upper part of the toe insertion parts, thereby damaging the toes. Further, foreign substances, such as dirt, dust, and moisture, are easily inserted into the toe insertion parts so that the shoes become easily dirtied or contaminated.

[0006] Further, the conventional toe insertion shoes in which the forefoot part of the shoe is divided into 5 parts has the convenience for activity, but the forefoot part that is divided in the toe shape is not familiar to people so that it causes the unwelcome attention to the people. Further, the toe insertion part is divided into 5 parts and the toes are independently inserted into the toe insertion parts, respectively, so that all toes cannot respond to the external shock caused by obstacles on a street (i.e. the shock is not dispersed) and only the toe receiving the shock resists against the shock so that there is a risk of causing toe fracture. Further, the protection of the toe against the shock from the upper part of the shoe is weak.

DISCLOSURE

Technical Problem

[0007] Accordingly, the present invention has been made to solve the above-mentioned problems occurring in the prior art, and an object of the present invention is to provide toe insertion shoes for easily protecting the feet from foreign substances of a ground.

[0008] Another object of the present invention is to provide toe insertion shoes having an effect of enhancing the health of the foot and being usable while maintaining the cleanness of the shoes.

[0009] Another object of the present invention is to provide toe insertion shoes which prevent toes from being individually bent and separated to prevent an injury, such as the toe fracture.

[0010] Another object of the present invention is to provide toe insertion shoes having an aesthetic design without causing unwelcome attention to the people.

Technical solution

[0011] In accordance with an aspect of the present invention, there is provided a toe insertion shoe with an integrated outsole, including: uppers including a front part of a shoe and toe insertion parts for independently laying at least one of toes of a user, the front part of the shoe being divided into at least two toe insertion parts; an outsole assembled with a lower part of the uppers while receiving a lower part of the uppers including the toe insertion parts and integrally formed with a part assembled with the toe insertion parts without separation according to a separated shape of the toe insertion parts; and a cover for covering an entire or a part of the toe insertion parts.

[0012] The cover is integrally formed with the outsole.

[0013] The uppers are optionally attached to and detached from the outsole including the cover.

[0014] The uppers include a shoe sole shaped like a lower part of the uppers in a lower part of the uppers.

[0015] The uppers further include an auxiliary cover in an exterior side of the uppers.

[0016] The uppers further include an auxiliary cover in an exterior side of the uppers.

ADVANTAGEOUS EFFECTS

[0017] According to the present invention, the outsole attached to a bottom surface of the toe insertion parts is integrally formed without the separation so that there is an advantage in that the function of the ventilation of the toe is maintained and the foot is easily protected from the foreign materials of the ground.

[0018] Further, according to the present invention, the outsole is integrally formed on the bottom surface of the toe insertion shoes and the cover is formed in the forefoot part so that the toe insertion shoes can be protected from the contamination and maintained in more clean state for use.

[0019] Further, according to the present invention, the toe insertion shoes advantageously prevent the toes from being individually bent and separated to prevent an injury, such as the fracture of the toe.

[0020] Further, according to the present invention, the toe insertion shoes advantageously provide an aesthetic design without causing unwelcome attention to the people.

[0021] Further, according to the present invention, the upper part is separated from the outsole part so that the single toe insertion shoes can be advantageously used for both outdoor shoes and indoor slippers.

BRIEF DESCRIPTION OF THE DRAWINGS

[0022] The above and other aspects, features and advantages of the present invention will be more apparent from the following detailed description taken in conjunction with the accompanying drawings, in which:

[0023] FIG. **1** is a side view illustrating toe insertion shoes having an integrated outsole according to an embodiment of the present invention;

[0024] FIG. **2** is a bottom view illustrating toe insertion shoes having an integrated outsole according to an embodiment of the present invention;

[0025] FIG. **3** is a side view illustrating toe insertion shoes having an integrated outsole according to another embodiment of the present invention;

[0026] FIG. **4** is a perspective view illustrating the conventional toe insertion shoes; and

[0027] FIG. **5** is a bottom view illustrating an outsole of the conventional toe insertion shoes.

DETAILED DESCRIPTION OF THE INVENTION

[0028] Hereinafter, preferred embodiments of the present invention will be described in detail with reference to the accompanying drawings. In the following description, detailed explanation of known related functions and constitutions may be omitted to avoid unnecessarily obscuring the subject manner of the present invention.

[0029] Further, the terms used in the description are defined considering the functions of the present invention and may vary depending on the intention or usual practice of a user or operator. Therefore, the definitions should be made based on the entire contents of the description for toe insertion shoes with an integrated outsole.

[0030] As shown in FIG. **1**, A toe insertion shoe **10** having an integrated outsole according to the present invention includes an upper **20**, an outsole **30**, and a cover **40**.

[0031] The upper of the toe insertion shoe **10** may include 5 toe insertion parts **25** formed in a front end of the shoe into which all the 5 toes are individually inserted, 2 toe insertion parts **25** into which a big toe is separately inserted and the remaining 4 toes are inserted together, or 3 toe insertion parts **25** into which a big toe and a little toe are separately inserted and the remaining 3 toes are inserted together. That is, the toe insertion shoe **10** according to the present invention can be applied regardless of the number of the toe insertion parts **25** formed in the front end thereof.

[0032] The outsole **30** included in every shoe is attached to a lower surface of the upper **20** and is adapted for absorbing the shock, maintaining a shape of the shoes, and protecting the sole of the foot. Then, in the toe insertion shoes including 5 toe insertion parts described in the above background as shown in FIGS. **4** and **5**, the outsole includes 5 toe insertion parts divided identically to the shape of the upper of the toe insertion shoes to be attached to a bottom surface of the upper.

[0033] However, as shown in FIG. **2**, the present invention is characterized in that the outsole **30** is integrally formed regardless of the shape of at least two divided toe insertion parts **25**. That is, the toe insertion parts **25** are divided into at least two parts, but a part of the outsole **30** corresponding to the toe insertion parts is integrally formed without separation. Therefore, the toe insertion shoe **10** having the above construction can sufficiently protect the toes from the foreign substances, such as a piece of glass or a nail, penetrated from the ground and prevent the toes from being individually bent or separated and damaged by external stimulation and shock because the shoes disperse the shock transferred from the ground to several toes without concentrating the shock to a single toe.

[0034] In the meantime, as in the case of the construction of general shoes, it is a matter of course that a mid-sole can be assembled between the outsole **30** and the upper **20**. Further, an insole is also included.

[0035] As shown in FIGS. **1** and **3**, the cover **40** is formed in a forefoot part of the shoes and covers an entire or a part of the toe insertion parts **25**. According to FIGS. **1** and **3**, the cover **40** covers a front end and a lateral surface of the shoes so that a large area of the upper part of the toe insertion parts **25** is exposed. However, the cover **40** is not limited to the shape illustrated in FIGS. **1** and **3** and may have a shape of covering the entire upper part of the toe insertion parts **25**.

[0036] Further, the cover **40** is separately formed and attached to the outsole **30** or is integrally formed with the outsole **30**.

[0037] As such, the cover **40** is assembled with the toe insertion shoes. However, according to the present invention, in contrary to general shoes, the pressure for bending the toes toward a center is not large applied. Therefore, the toe insertion shoes can prevent the toes of the user from being bent and sufficiently protect the toes from the front part or upper part of the shoes.

[0038] In the meantime, the toe insertion shoes including the integrated outsole according to the present invention further include an auxiliary cover **50** in addition to the cover **40**. The auxiliary cover **50** can be made of fabric, leather, rubber, or the like, and its shape is not specifically limited. However, it is preferred that the auxiliary cover **50** is shaped like a mesh so as to improve ventilation. As shown in FIG. **1**, the auxiliary cover **50** is attached to an end of the cover **40** and covers the toe insertion parts **25** and the lateral and rear sides of the shoes or to cover the forefoot part only including the toe insertion parts **25**. Further, the auxiliary cover **50** is attached to the upper **20** without being connected with the cover **40**. Otherwise, if an additional accessory is attached to an exterior of the shoes, the auxiliary cover **50** can be attached to the accessory. Such that, the construction method of the auxiliary cover **50** is not specifically limited.

[0039] In the meantime, FIG. **3** illustrates the toe insertion shoes having the integrated outsole according to another embodiment of the present invention in which the upper **20** and the outsole **30** are freely attached and detached. Because of the free attachment/detachment of the upper **20** the outsole **30**, the upper **20** is individually separated, to be used for indoor slippers, or the like.

[0040] At this time, a shoe sole can be additionally included in a bottom of the upper **20**. The shoe sole is formed in a shape identical to the shape of the separated toe insertion parts **25** to be attached.

[0041] According to the assembly method of the upper **20** with the outsole **30** of the present invention as shown in FIG. **3**, a fastener **60** extending from the outsole **30** toward a lateral side of the shoe is formed in the outsole **30** and a fixture **70** shaped like a ring is formed in the upper **20**. The fastener **60** is fitted into the fixture **70** and then an end of the fastener **60** is fixed to the other lateral side of the shoe. At this time, the shape of the outsole **30** is formed to be flat like a shape of a rearfoot part so that the outsole **30** is easily attached/detached and provides the comfort when worn. Further, as in the case of conventional shoes, it is a matter of course that the rearfoot part of the outsole **30** upwardly extends as if it surrounds a heel of the upper **20**.

[0042] In the above description, the fastener **60** and the fixture **70** are used as the assembly means for assembling the upper **20** and the outsole **30**. However, the assembly means is not limited thereto and may include various conventional assembly means, such as a Velcro tape, a hook, or the like.

[0043] Further, the method for assembling the upper **20** and the outsole also includes fitting the upper **20** into the outsole **30** without using the additional assembly means. That is, the outsole **30** is formed in a shape as shown in FIG. **1** and the toe insertion parts **25** of the upper **20** is fixed to the forefoot part by the cover **40** and the rearfoot part protrudes and extends in an upper direction as if it surrounds the heel so that the heel part of the upper **20** is fitted into the protruding heel part of the outsole **30**. In this case, a separate assembly means can be additionally formed on a top side of the foot of the upper, but such an assembly means is not necessarily required.

[0044] As described above, the toe insertion shoes including the integrated outsole having the above construction according to the present invention have an advantage over the conventional toe insertion shoes as it is, such as the excellent ventilation and the maintenance of the health of the foot without deforming the toe shape, and the enhanced function of protecting the foot from the external dangerous material and protecting the shoes from contamination.

[0045] The foregoing is merely an exemplary embodiment of the technical sprit of the present invention and it will be readily understood by those skilled in the art that various modifications and changes can be made thereto within the technical spirit and scope of the present invention.

1. A toe insertion shoe with an integrated outsole, comprising:

an upper comprising toe insertion parts, in each of which at least one toe of a user is independently seated, the toe insertion parts being formed by dividing a front part of the upper;

an outsole coupled with a lower part of the upper while supporting all the lower part of the upper including the toe insertion parts, the outsole having an integrally formed part coupled with the toe insertion parts without separation according to a separated shape of the toe insertion parts; and

a cover for covering an entire or a part of the toe insertion parts.

2. The toe insertion shoe as claimed in claim **1**, wherein the cover is integrally formed with the outsole.

3. The toe insertion shoe as claimed in claim **1**, wherein the upper is detachably attached to the outsole including the cover.

4. The toe insertion shoe as claimed in claim **3**, further comprising a bottom sole provided at a lower part of the upper, the bottom sole having a shape corresponding to that of the lower part of the upper.

5. The toe insertion shoe as claimed in claim **1**, further comprising an auxiliary cover in an exterior side of the upper.

6. The toe insertion shoe as claimed in claim **3**, further comprising an auxiliary cover in an exterior side of the upper.

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