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Applicant: **RED WING SHOE COMPANY, INC.**  
 Riverfront Centre, 314 Main Street  
 Red Wing, Minnesota 55066(US)

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Inventor: **Kenyon, Arthur E.**  
 1547 Woodland Drive  
 Red Wing, Minnesota 55066(US)

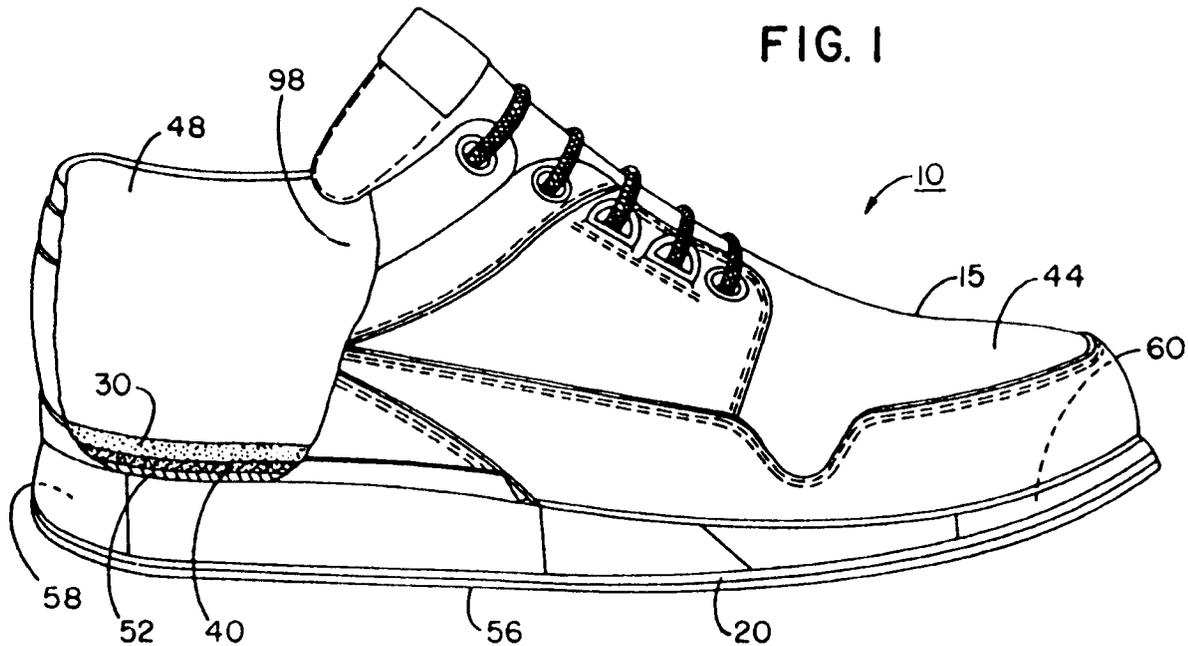
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Representative: **Goddar, Heinz J., Dr. et al**  
**FORRESTER & BOEHMERT**  
 Franz-Joseph-Strasse 38  
 W-8000 München 40 (DE)

**An adjustable child's shoe with a removable pad.**

A removable pad and an inner sole are placed in a child's shoe so that the shoe can be adjusted to accommodate growth of the child's foot. The inner

sole, which may be attached to the removable pad, can be removed and discarded to increase the size of the shoe.



**FIG. 1**

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## Background of the Invention

Shoes are manufactured in a wide variety of lengths and sizes to accommodate various shapes of feet. The shape and size of a child's foot changes dramatically from birth through puberty. This results in children tending to rapidly outgrow their shoes before their shoes actually wear out. As a consequence, parents are forced to spend a significant amount of time and money buying new shoes for their children as their children continue to grow. The old but useable shoes are either saved for a younger child or, more likely, discarded.

There have been various advances made in the shoe industry to accommodate the differences in the shape of people's feet. One advance involves a shoe with an auxiliary insole which can be removed at the time of sale to permit a custom fit of the purchaser's foot to the shoe. See U.S. Patent No. 3,442,031. Another advance involves inserting a pad, comprised of various layers of varying size, which can be tailored by removing various layers to fit a specific foot shape. See U.S. Patent No. 4,813,157. Both of these advances involve adjustments that are made to the shoe when the shoe is fitted at the time of purchase. Neither advancement, however, provides for adjustment of the shoe after the foot grows.

It is the object of the disclosed invention to provide an arrangement which will accommodate the growth of a child's foot after the shoe has been purchased.

It is a further object of the disclosed invention to provide a method for adjusting the size of a child's shoe to accommodate the growth of a child's foot.

## Summary of the Invention

Disclosed herein is a child's shoe which can be adjusted to accommodate the growth of a child's foot. The shoe has an outer sole which has an upper foot supporting surface area. A standard upper portion of the shoe is permanently attached to the outer sole. A removable pad which is about the same size as the outer sole is placed inside the shoe and positioned over but is not attached to the outer sole. An inner sole, which has an upper foot engaging surface area and is substantially the same size as the removable pad, is placed inside the shoe and positioned over the removable pad.

The shoe can include a means, such as an adhesive, which attaches the removable pad to the inner sole so that the inner sole can be removed from the removable pad after the child's shoe needs adjustment due to the growth of the child's foot.

Also disclosed herein is a method for adjusting the size of a child's shoe to accommodate the growth of a child's foot. The method involves taking a shoe and placing a removable pad, which is substantially the same size as the shoe's outer sole, over but unattached to the shoe's outer sole and then placing an inner sole, which is substantially the same size as the removable pad, over the removable pad upon initial fitting of the child's shoe to the child's foot. After the child's foot has grown, the inner sole is lifted from the shoe, the removable pad is withdrawn from the shoe, and the inner sole is positioned back into the shoe. As a result, the shoe can now accommodate the child's foot which has grown.

## Brief Description of the Drawings

Figure 1 is a side elevation, partly in cross-section, of a shoe incorporating the removable pad and inner sole.

Figure 2 is a perspective view of an inner sole.

Figure 3 is a perspective view of a removable pad.

## Detailed Description of the Invention

Referring to Figure 1, a child's shoe 10 is shown comprising an upper portion 15, an outer sole 20, an inner sole 30, and a removable pad 40. Upper portion 15, which can be made of a natural material such as leather or a synthetic material, has an exterior surface 44 and an interior surface 48 which contacts a foot when the foot is in shoe 10. Upper portion 15 is permanently attached by stitching or an adhesive to outer sole 20. Outer sole 20, which can be made of rubber, leather or various other types of natural or synthetic materials, has an upper foot supporting surface area 52 and a lower exterior contacting surface area 56. Outer sole 20 has a heel supporting portion 58 and a toe supporting portion 60.

Figure 2 depicts inner sole 30 which is made of a flexible, solid material and has a rear heel portion 62 and a front toe portion 64. Outer sole 30 has an upper, foot engaging surface area 67 and a lower surface area 69. Inner sole 30 is generally flat but does have a ridge surface 71 which rises up from upper foot engaging surface area 67 and lines rear heel portion 62. Ridge surface 71 permits inner sole 30 to remain permanently positioned when inner sole 30 is in shoe 10. Ridge surface 71 also provides an arch support area 73 and aligns a foot so that it will be properly positioned over inner sole 30.

Figure 3 depicts removable pad 40 which can be composed of any flexible natural or synthetic solid material such as, but not limited to, rubber or

sponge. Removable pad 40 has a superior inner sole engaging surface area 76 and an inferior outer sole engaging area 78. Removable pad 40 has a posterior heel portion 81 and an anterior toe portion 83.

An attaching means 85 can be used on superior surface area 76 to cause removable pad 40 to be affixed to inner sole 30 in shoe 10. Attaching means 85 can be comprised of, but is not limited to, a glue, an adhesive tape or a velcro strip which permits removal of inner sole 30 from removable pad 40.

In a preferred embodiment, a first attaching means 85A can be placed on superior surface area 76 of posterior heel portion 81 of removable pad 40 so that the removable pad 40 can be attached to rear heel portion 62 of lower surface area 69 of inner sole 30. A second attaching means 85B can be placed on superior surface area 76 of anterior toe portion 83 of removable pad 40 so that removable pad 40 can be attached to front toe portion 64 of lower surface area 69 of inner sole 30.

In the preferred embodiment, first attaching means 85A is comprised of a circular piece of double sided adhesive tape 85C and second attaching means 85B is comprised of two rectangular pieces of double sided adhesive tape 85D and 85E.

Upper foot supporting area 52 of outer sole 20 is substantially equal in size to inferior outer sole engaging surface area 78 of removable pad 40. Superior inner sole engaging surface area 76 of removable pad 40 is substantially equal in size to lower surface area 69 of inner sole 30.

With the various components of shoe 10 thus defined, a method for adjusting the size of shoe 10 to accommodate the growth of a child's foot is described below. Upon initial fitting of a child's foot into shoe 10, removable pad 40 which is attached to inner sole 30, as described above, can be placed inside shoe 10 to ensure a proper fitting of the child's foot to shoe 10. After a child's foot has grown so that existing shoe 10, as described above, is too small for the foot, inner sole 30 and pad 40 can be lifted out of shoe 10 so that pad 40 can be removed and discarded. Inner sole 30 can then be returned to shoe 10. The new arrangement is advantageous because it results in shoe 10 that has a larger interior volume 98 which can accommodate the growth of a child's foot. As a consequence, parents need not replace their children's shoes as often because the child can use shoe 10, as described above, over a greater period of time.

### Claims

1. A child's shoe capable of size adjustment to accommodate the growth of a child's foot,

comprising:

- a. an outer sole having an upper foot supporting surface area;
  - b. an upper portion permanently attached to said outer sole;
  - c. a removable pad, having a surface area substantially equal in size to said outer sole surface area, being placed inside the shoe and positioned over but unattached to said outer sole; and
  - d. an inner sole having an upper foot engaging surface area and a lower surface area having an area substantially equal in size to said surface area of said removable pad, said inner sole being placed inside the shoe and positioned over said removable pad.
2. A child's shoe according to claim 1, further comprising a means for attaching said removable pad to said inner sole, wherein said means permits future removal of said inner sole from said removable pad.
  3. A child's shoe according to claim 2 wherein said means for attaching said removable pad to said inner sole comprises an adhesive capable of permitting future removal of said inner sole from said removable pad.
  4. A child's shoe comprising an outer sole having an upper foot supporting surface area, an upper portion permanently attached to said outer sole, and an inner sole removable during normal use having an upper foot engaging surface and lower surface, wherein the improvement comprises a removable pad, having a surface area substantially equal in size to said surface area of said outer sole, positioned between said outer sole and inner sole such that said pad is capable of being removed from the shoe to accommodate the growth of a child's foot, and a means for removably attaching said removable pad to said inner sole.
  5. A child's shoe according to claim 4 wherein said means for attaching said removable pad to said inner sole comprises an adhesive capable of permitting future removal of said inner sole from said pad.
  6. A method for adjusting the size of a child's shoe to accommodate the growth of a child's foot, said shoe having an upper portion attached to an outer sole having an upper foot supporting surface area, comprising the steps of:

- a. attaching an inner sole having a surface area to a removable pad having a surface area substantially equal in size to said inner sole surface area;
- b. placing said inner sole and said removable pad, having said pad surface area substantially equal in size to said outer sole surface area, over but unattached to said outer sole upon initial fitting of the child's shoe to the child's foot; and
- c. lifting said inner sole from said shoe, removing said removable pad from said shoe and replacing said inner sole to said shoe in order to accommodate the growth of a child's foot.

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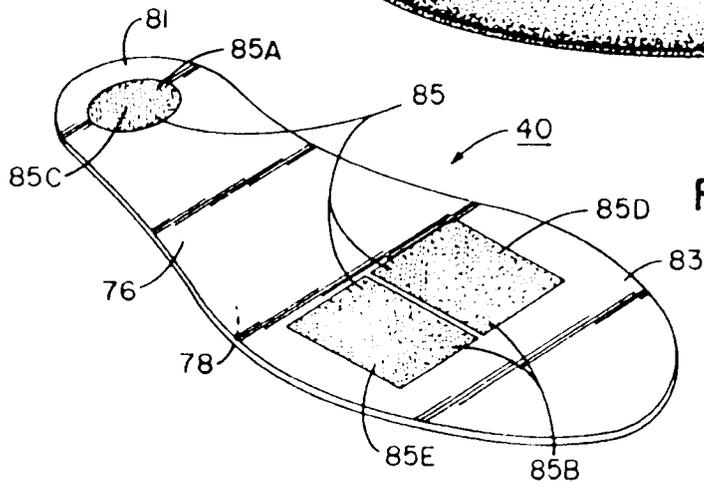
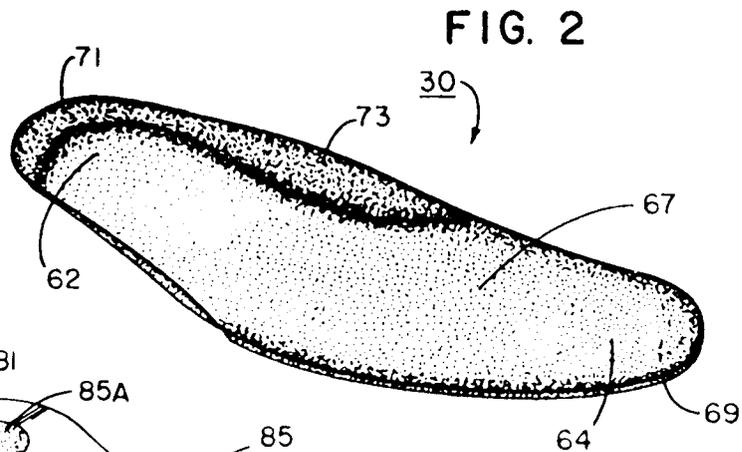
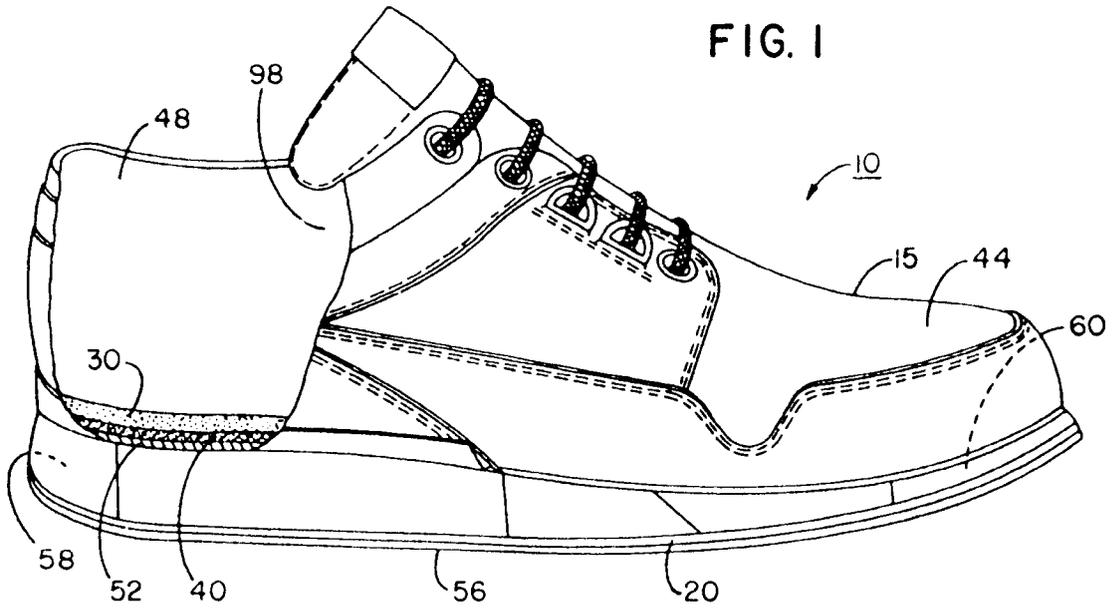
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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
Y	WO-A-8 101 948 (CLARVIT) * the whole document * ---	1-6	A43B3/26 A43B3/30
Y	WO-A-9 011 698 (ROSEN) * the whole document * ---	1-6	
Y	US-A-2 220 439 (BLOCK) * page 1, right column, line 16 - line 40; figures * ---	1-6	
Y	DE-A-2 259 206 (KARL BENNER OHG) * page 2, paragraph 3 ; page 3, paragraphs 3,4 ; ---	1-6	
D,A	EP-A-0 254 662 (BOISVERT ET AL.) -----	3,5	
			<b>TECHNICAL FIELDS SEARCHED (Int. Cl.5)</b>
			A43B
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 19 NOVEMBER 1992	Examiner MATHEY X.C.M.
<b>CATEGORY OF CITED DOCUMENTS</b> X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ..... & : member of the same patent family, corresponding document			

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