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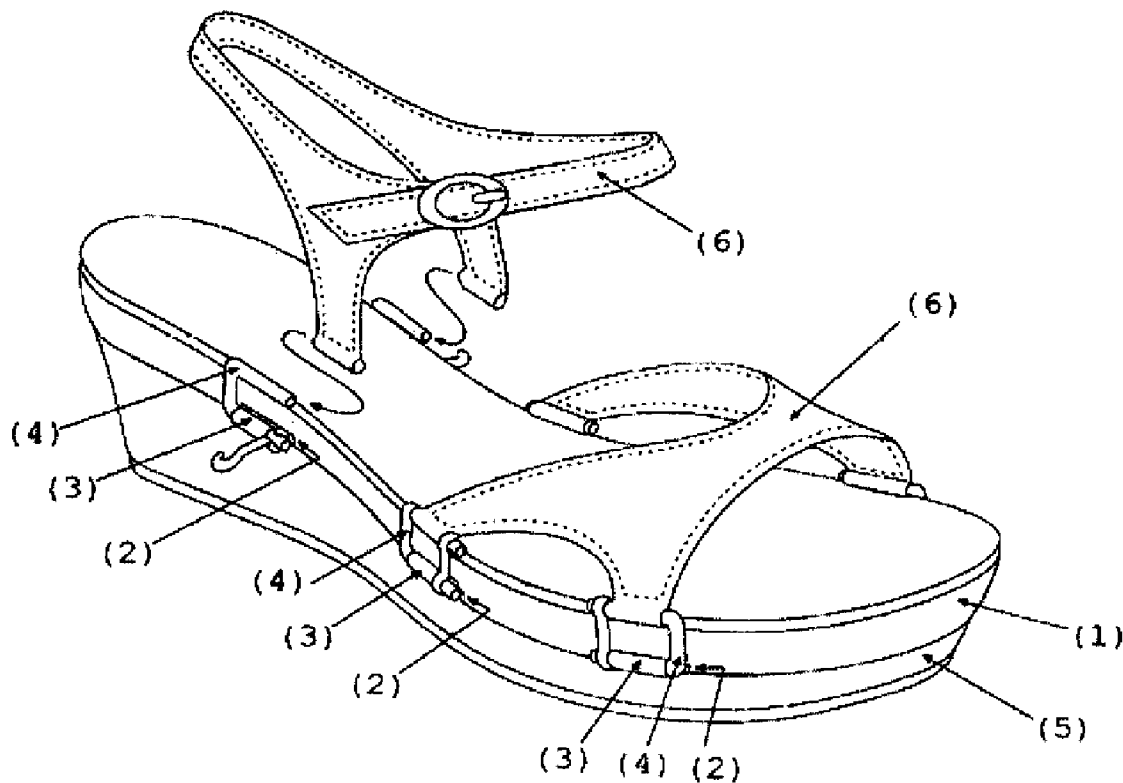
(19) **United States**(12) **Patent Application Publication**  
**Bastida et al.**(10) **Pub. No.: US 2012/0216429 A1**(43) **Pub. Date: Aug. 30, 2012**(54) **SOLE FOR INTERCHANGEABLE CUT SHOE  
OR SANDAL**(30) **Foreign Application Priority Data**

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(76) Inventors: **Josefina Batanero Bastida, Mexico**  
**(MX); Eduardo Gaona Zamora,**  
**Mexico (MX); Elisa Lopez Alanis,**  
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**A43B 13/14** (2006.01)(52) **U.S. Cl.** ..... **36/25 R**(57) **ABSTRACT**

A sole with folding iron fittings around it, formed by a sole of any material, either natural or synthetic, between the layers of which one or more straps, provided with one or more folding iron fittings through which an interchangeable shoe cut passes, are attached.

This allows users to vary the color, shape, length, etc. of the straps, and therefore design the piece of footwear according to their needs.

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(2), (4) Date:**Feb. 27, 2012**

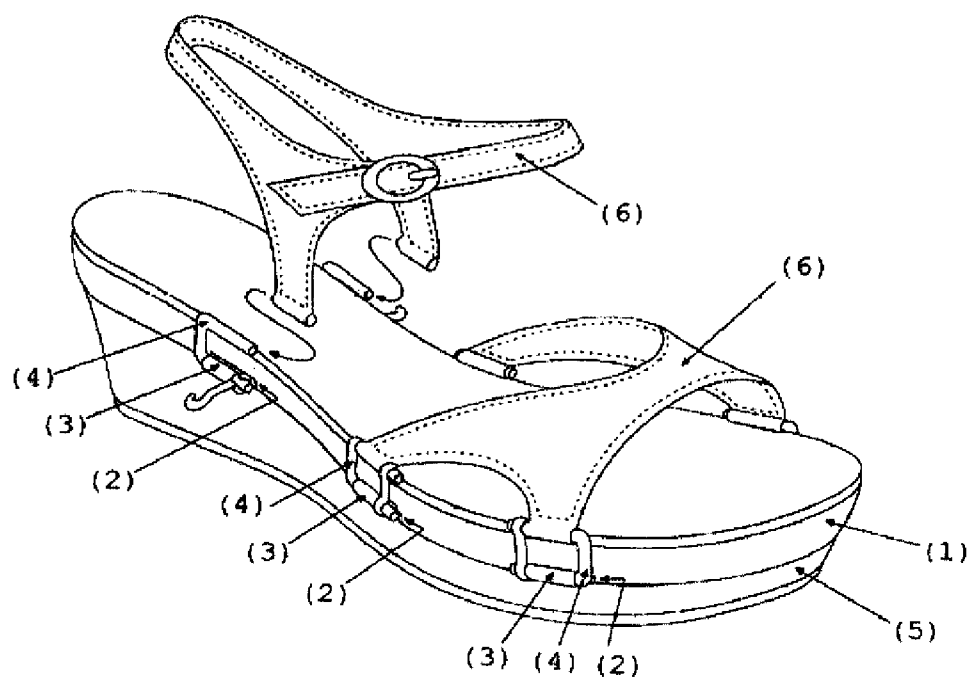


FIG. 1

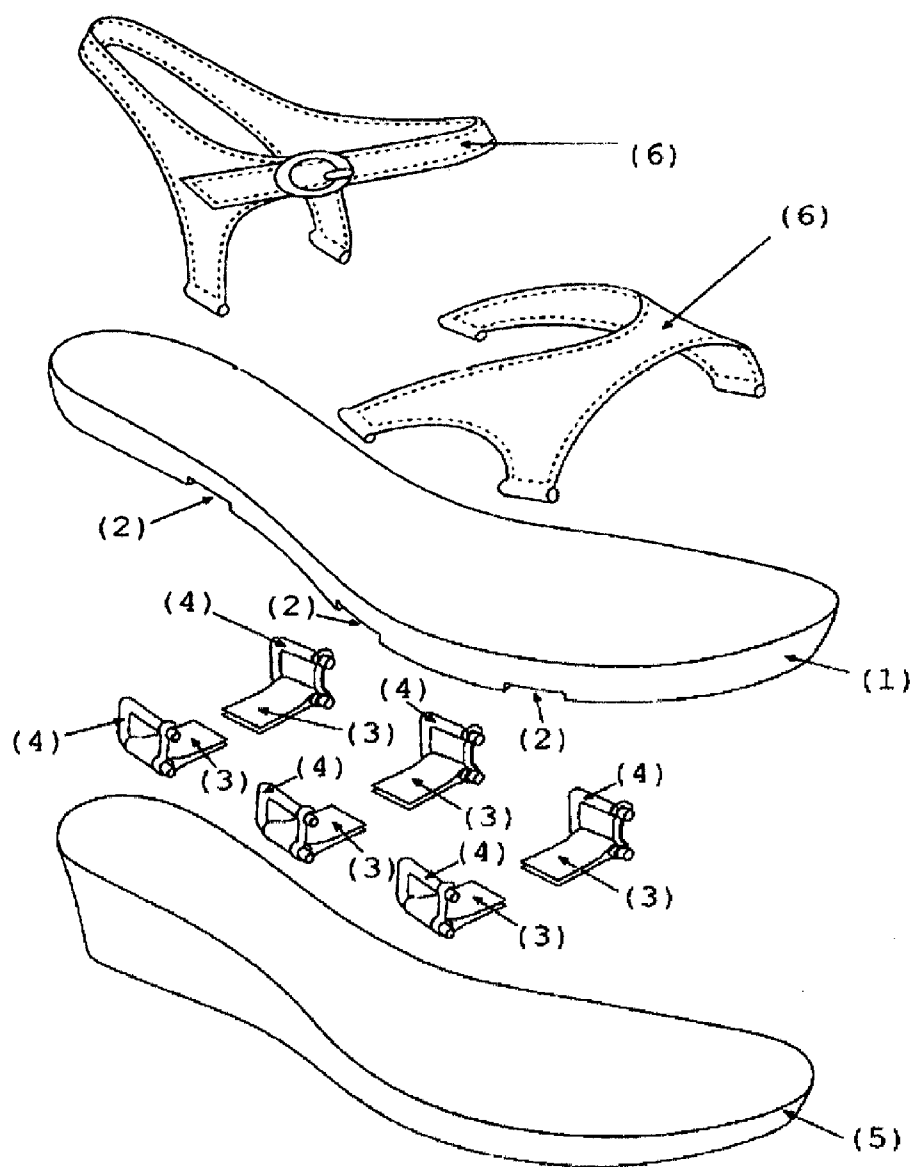


FIG. 2

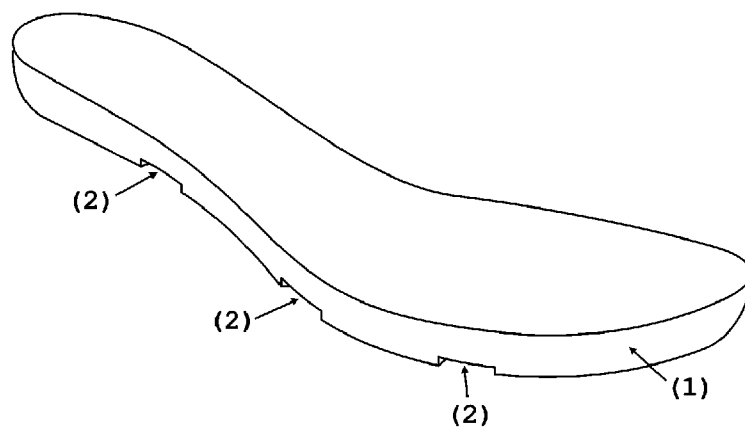


FIG. 3

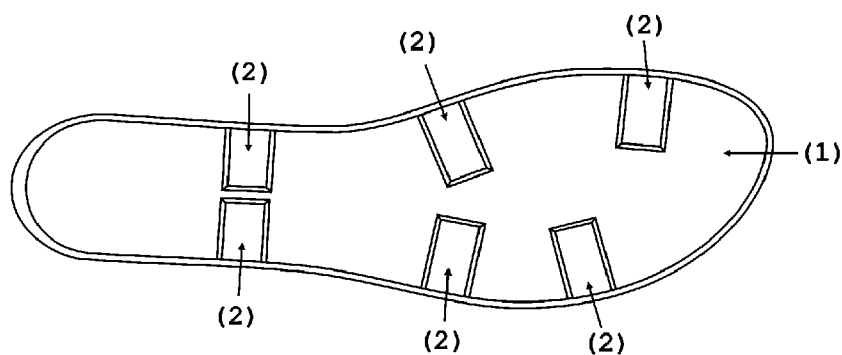


FIG. 4

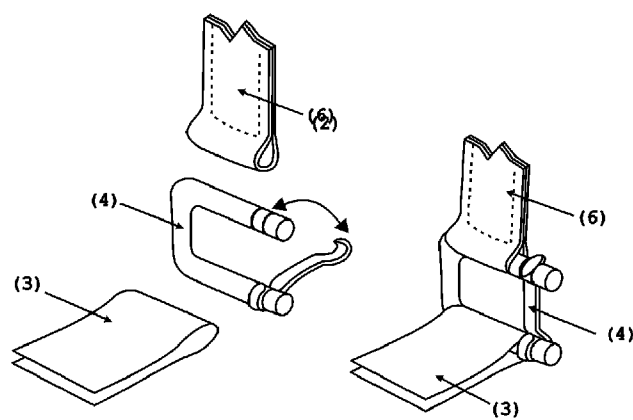


FIG. 5



FIG. 6

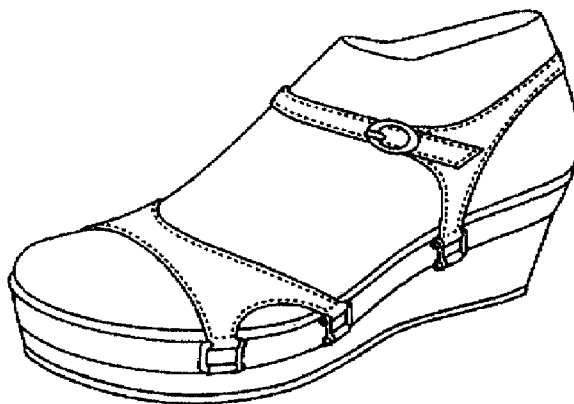


FIG. 7

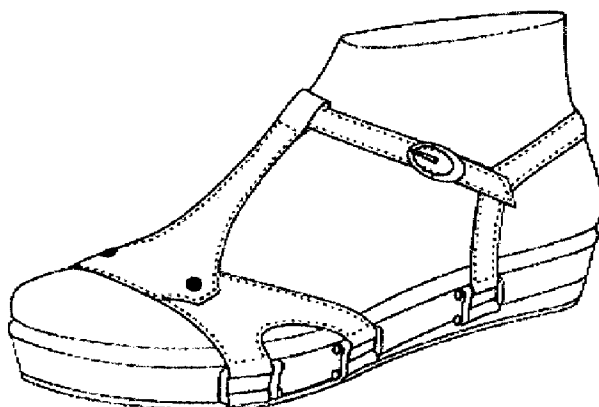


FIG. 8

## SOLE FOR INTERCHANGEABLE CUT SHOE OR SANDAL

### BACKGROUND

**[0001]** This invention consists in the improvement of the Utility Model registered in Mexico under no. PA/u/2006/000177 and in Spain under no. U200602520, as well as under PCT international application no. PCT/MX/2077/000084, which is a sole allowing to interchange the cuts in a sandal or shoe, by means of a fixed system using rigid straps provided with some iron fittings at the end, either sewed or glued between at least two pieces of sole: one in contact with the foot and the other in contact with the floor; the folding iron fittings design allows that several cuts of the piece of footwear pass.

**[0002]** The improvement represents a novel solution to the limitations of the previously referred to Utility Model. This improvement consists in a sole with individual holes or channels to pass some straps around the perimeter of the sole, and which carry some folding iron fittings where the interchangeable cuts are passed through.

### BRIEF DESCRIPTION OF THE DRAWINGS

**[0003]** FIG. 1 is a perspective view of the sole already assembled with the construction system which allows interchanging the cuts.

**[0004]** FIG. 2 is a view of the components of the sole.

**[0005]** FIG. 3 is a perspective view of the upper layer of the sole (1) with channels to pass the folding iron fittings through.

**[0006]** FIG. 4 is a view under the upper layer of the sole with channels (2).

**[0007]** FIG. 5 is a view of the straps (3) holding the folding iron fittings (4), which allows putting in and out any interchangeable cut.

**[0008]** FIGS. 6, 7, and 8 represent views of the different shapes of the sole with different upper cuts assembled into the folding iron fittings.

### DETAILED DESCRIPTION OF THE INVENTION

**[0009]** This invention represents a novel solution to the limitations of the previously mentioned Utility Model called "Sole with surrounding links which allow users to design and transform their sandals" for the case of interchanging the cuts of the shoe.

**[0010]** The invention consists in a second version of the Utility Model registered in Mexico under no. PA/u/2006/000177 and in Spain under no. U200602520, as well as in the PCT international application no. PCT/MX2077/000084.

**[0011]** This improvement consists of a sole with folding iron fittings on its perimeter, which has a sole body with several layers whose essential quality is to pass through an

upper section (1) and a lower section (5); one or more straps (3) are attached to the sole body; the one or more straps being in the channels (2) and which are made of a resistant and flexible material and hold at their ends some folding iron fittings (4).

**[0012]** The length of the straps (3) barely exceeds the width of the sole. Thus, the iron fittings (4) sewed thereto are attached to the sole's edges, without being too big neither upwards (so as not to affect the foot) nor downwards (so as to avoid tripping), but being somewhat loose to both directions. The width of the upper section of the sole body (1), that is, the upper layer or layers as a whole, will be bigger than the height of the iron fittings.

**[0013]** The shape, arrangement, and material of the links (4) will depend on the different models (metal, plastic, lined way as the sole, etc., ring-like, rectangle-like, with iron fittings, etc.). So, for example, some wide straps (3) may need a lower number of links (4) around the sole.

**[0014]** The folding iron fittings (4) allow then putting on and taking off different cuts (6) of one sole.

1. A sole with folding iron fittings on the perimeter, comprising:

a sole body forming an upper section, a lower section, and two sides;

one or more straps transversely arranged in the mid part of the sole body between the upper and the lower sections, which juts out on the sides of the sole body,

one or more folding iron fittings attached to each end of the one or more straps and where the width of the upper section of the sole body is bigger than the height of links, so that the links do not reach the upper surface of the sole, therefore avoiding contact with feet, and where the straps are fixed between the lower and the upper section of the sole body.

2. The sole according to claim 1, wherein the sole comprises channels to pass the one or more straps that hold the folding iron fittings, and where the upper section is formed by at least one layer of upper sole and the lower sole, by at least one layer of lower sole.

3. The sole according to claim 2, wherein the one or more straps are sewed between the at least one layer of upper sole and the at least one layer of lower sole.

4. The sole according to claim 2, wherein one or more straps are glued between the at least one layer of upper sole and the at least one layer of lower sole.

5. The sole, according to claim 1, wherein the links pass through one or more interchangeable straps forming the upper cut of the piece of footwear.

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