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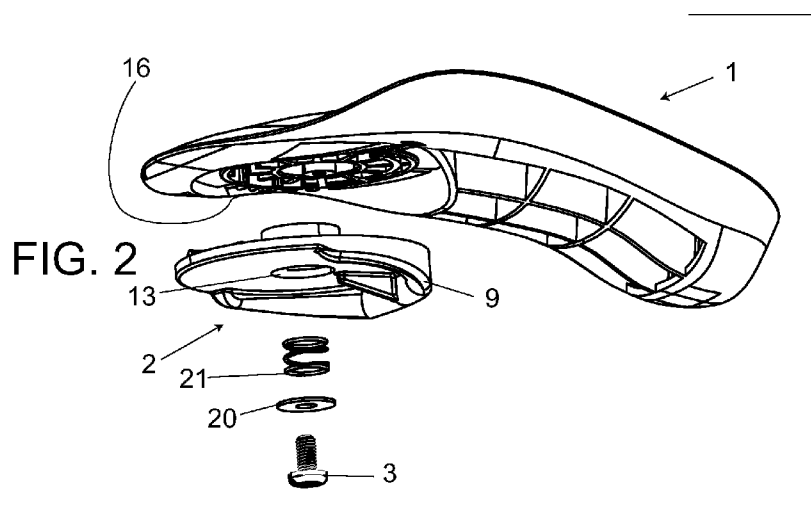
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(54) Title: ADJUSTABLE FOREFOOT POSTING FOR ORTHOTIC



(57) Abstract: An orthotic device has a readily adjustable variable forefoot posting system. In some embodiments, a generally planar plate is pivotally coupled to a foot-receiving shell. The plate is generally under the arch and not in contact with the supporting surface when in a neutral position. Along the plates perimeter are raised regions that can be deployed into position as a forefoot post via pivoting the plate. In some versions, adjustability is via a sliding motion. Some areas have a greater height than others do and these raised areas or protrusions can be set at either an inner side or an outer side. Depending upon the shape of the ridges on the plate and the plates pivoted position, a range of tilts can be variability provided. The plates can be part of an interchangeable system providing more options. Professional versions can have a greater range of settings than consumer versions.

AMENDED CLAIMS

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It is claimed:

1. A foot-supporting device having a post repositionably coupled to a foot receiving plate, the post having at least two regions of differing heights and the
5 repositionability of the post relative to the foot receiving plate providing for at least two distinct resulting forefoot angles.
2. The foot-supporting device of claim 1 where the coupling provides for a pivoting motion to achieve distinct forefoot angles.
3. The foot-supporting device of claim 1 where the coupling provides for a sliding
10 motion to achieve distinct forefoot angles.
4. The foot-supporting device of claim 1 where the coupling provides for a rotating motion to achieve distinct forefoot angles.
5. The foot-supporting device of claim 1 where the post comprises a beveled ridge.
6. A foot support device having a tilt selector abutted and pivotally, or optionally
15 rotatably, repositionally coupled to the underside of a foot receiving plate, the selector having at least one raised perimeteric portion such that alternate angular positions effectively provide alternate degrees of tilt to the plane of a received foot, the tilt with respect to a plane on which the foot support device rests.
7. The foot-supporting device of claim 6 wherein the range of pivoting, or optionally
20 rotating, and the perimeteric shape are such as to provide for variable tilting to be generally toward the outside.
8. The foot-supporting device of claim 6 wherein the range of pivoting, or optionally rotating, and the perimeteric shape are such as to provide for variable tilting to be generally toward the inside.

- 25 9. The foot-supporting device of claim 6 wherein the range of turning and the
perimeteric shape are such as to provide for both tilting to the outside and, at an
alternate angular position, tilting to the inside.
10. The foot supporting device of claim 6 wherein the at least one raise region
comprises at least two raised regions of different heights.
- 30 11. An adjustable orthotic device comprising:
- a) a base of a thin arcuate shape having an upper surface adapted for receiving
a foot, and an opposed lower surface;
 - b) a selector having a generally planar upper surface and an opposed lower
surface, the lower surface having at least one protrusion along a portion of its
35 perimeter, said selector rotatably coupled to said base with at least a portion
of the upper surface of said selector effectively abutting a portion of the
lower surface of said base; the at least one protrusion collectively having at
least two areas of mutually disparate height;
- further, said selector and base together presenting a surface generally defining a
40 support plane, the selector so shaped and configured as to, vary positionally
relative to the base, provide adjustability of the tilt of the support plane relative
to the upper surface of the base.
12. The device of claim 11 wherein said at least one protrusion comprises a sloped
shape.
- 45 13. The device of claim 11 where said at least one protrusion comprises two or more
discrete, piecewise, generally flat, regions.
14. The device of claim 11 where the selector has a generally disk-like shape.
15. The device of claim 11 where the selector has a generally annular shape.
16. The device of claim 11 where the heel region of the base has a hollow region
50 extending to an opening on the lower surface.

17. The device of claim 16 where the hollow region leaves a relatively thin circular “drum head” of material above the hollow area to the upper surface of the heel region of the foot-receiving platform.

18. A forefoot posting system comprising:

55 a generally planar selector plate having an upper side and a lower side; one side having at least one raised area along its perimeter and the opposing side being generally flat; further the selector plate has an attachment point suitable for a rotatable, or optionally pivotable, connection providing for angular repositioning relative to the underside of a foot receiving structure; the rotatable connection
60 and the at least one raised area so shaped and configured as to provide, when the posting system is coupled to the underside of a foot receiving plate, for a variable forefoot posting function.

19. The forefoot posting system of claim 18 wherein at least one raised area comprises at least two raised areas.

65 20. The forefoot posting system of claim 18 wherein alternate angular positions of the selector locate the forefoot post in alternate locations relative to a supported foot such that the substantive effect of the post occurs, respectively, at alternate points in a gait cycle.

21. A method of adjusting a forefoot post comprising:

70 a) providing an apparatus having a tilt selector abutted and pivotally, or optionally rotatably, coupled to a foot receiving plate, the selector having at least one raised portion such that alternate positions effectively provide alternate degrees of tilt to the plane of a received foot, the tilt with respect to a plane on which the foot
75 support device rests;

b) directing an individual to walk with that apparatus between a foot and a supporting surface with the selector set to a first position;

c) adjusting the degree of tilt provided by the apparatus by pivoting the lift plate of the apparatus to a second position;

80 d) directing the individual to walk with the apparatus set in the second position.

22. An item of footwear comprising the posting system of claim 18.

23. The footwear of claim 22 wherein the footwear is a shoe.

85 24. The footwear of claim 23 wherein the posting system is operatively repositionable to adjust posting from the outside of the shoe.

25. The footwear of claim 22 wherein the footwear is a sock.

26. The footwear of claim 22 wherein the footwear is a sports-specific item.