

Technical Specification - Multi-wheel heeling apparatus (Heelys)

Soles and Openings

- 1.1 A multi-wheel heeling apparatus consists of 3 portions: a forefoot portion, a heel portion, and an arch portion.
- 1.2 The forefoot portion of the sole is inoperable for rolling to provide primary contact with the surface for: walking, running, and inhibit rolling.
- 1.3 The heel portion of the sole of the footwear includes a brake operable for slowing the heeling apparatus.
- 1.4 A multi-wheel heeling apparatus has two openings: a first opening, and a second opening.
- 1.5 The first opening is formed in a heel portion of the sole.
- 1.6 The second opening is formed in at least a portion of the arch portion of the sole adjacent the first opening.

Wheel assemblies

- 2.1 The multi-wheel heeling apparatus includes: a first wheel assembly, and a second wheel assembly.
- 2.2 The first wheel assembly includes a first wheel mounted on a first axle. The first wheel assembly includes a first mounting structure operable to support the first axle so that portion of the first wheel resides in the first opening.
- 2.3 The first wheel assembly is removably coupled to the wheel mounting structure.
- 2.4 The second wheel assembly includes a second wheel mounted on a second axle. The second wheel assembly includes a second mounting structure operable to support the second axle so that a portion of the second wheel resides in the second opening.
- 2.5 The second wheel assembly is removably coupled to the wheel mounting structure.
- 2.6 The first axle and second axles tensioningly couple to the wheel mounting structure.

Wheels

- 3.1 A wheel may be constructed or made of virtually any known or available material such as: a urethane, a plastic, a polymer, a metal, an alloy, a wood, a rubber, and a composite material. The material a wheel is made of may include: aluminum, titanium, steel, and a resin.
- 3.2 The material a wheel is made of will: be durable, provide quiet performance, and will provide a “soft” or “cushioning” feel.

- 3.3 The amount or length of the portion of a wheel that extends below the bottom of the sole will preferably be less than the diameter of the wheel. The amount or length of the portion of a wheel that extends below the bottom of the sole may not be restricted by the diameter of the wheel.
- 3.4 The diameter of the first wheel is substantially similar to a diameter of the second wheel.
- 3.5 The first and second wheels are removably coupled to the mounting structure.
- 3.6 The first and second wheels provide contact with the surface to roll on the surface when the forefoot is disengaged from the surface.

Applicable Standards

- 4.1 A multi-wheel heeling apparatus is governed by all the applicable standards contained in ICS 61.060 (Footwear Including shoelaces).