

Modular Prosthetic Foot

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This invention relates to a modular prosthetic foot with ankle and forefoot components and that have the ability to rotate in a manner that is very similar to a real foot, in comparison to existing prosthetic feet. The modular prosthetic foot may be utilized worldwide in a variety of climates or terrains. The simple and durable design of the modular prosthetic foot makes it useful for almost any lower extremity amputee. While there are already prosthetic ankles and feet on the market, there still remains a need for a modular prosthetic foot, in particular, one that mimics the sub-talar joint of a human foot. This invention replicates sub-talar joint mechanics better than other existing prosthetic feet.

A modular prosthetic foot is characterized by an ankle component; a forefoot component having a circular part with a rounded top surface and at least one flat side surface, said circular part being connected to a rear part of the forefoot component; a forefoot cushion bumper positioned around the circular part; and a heel component.

Two companies have been approached and expressed interest in the invention. The military's mission includes creating programs around the world that establish means for countries to provide care to local amputees. For example, there are 20,000 – 200,000 estimated amputees in Iraq and 75 % of them are to lower extremities.

The prosthetics industry is over \$2 billion/year. Prosthetic feet are a large segment. There are large foreign markets in Europe, Canada, Asia, and the Middle East although commercialization may be difficult in certain political climates.

Commercial interest has been expressed. Most companies in this area are international; most manufacturers are multi-national.

There is U.S. and worldwide commercial potential as the number of amputees is increasing and they have longer life spans.