



# Intellectual Property Office

## Joint Load Sparring Footwear

**Technology Reference**  
R241

**Keyword**  
Orthopedic Footwear

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**Patent Status**  
Patent Application  
Submitted

### AREAS OF APPLICATION

- Footwear for individuals with lower extremity osteoarthritis or individuals who are at risk for developing osteoarthritis

### ADVANTAGES

- Decrease hip and knee joint loads in individuals with osteoarthritis, or in individuals at risk for osteoarthritis
- Decrease pain and increase functioning in individuals with osteoarthritis
- Decrease the progression of osteoarthritis in individuals diagnosed with osteoarthritis, or in individuals who are at risk for developing osteoarthritis

### THE TECHNOLOGY

This novel invention describes a type of footwear that mimics barefoot walking in such a way that it will reduce the hip and knee joint loads in individuals with osteoarthritis; or in individuals who are at risk for lower limb osteoarthritis. It is presumed that a long term decrease in joint loads could slow the progression of osteoarthritis. This invention consists of a shoe design with the features of the bare foot. Some features of the shoe include: spherical shaped heels, triangular shaped sole, thin and lightweight flexible soles, slight built-in lateral wedge to further decrease the peak joint load and the shoe would be contoured to wrap around the foot like a glove.

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