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# United States Patent [19]

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Allen

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[54] **PROSTHETIC FOOT**

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[\*] Notice: The term of this patent shall not extend beyond the expiration date of Pat. No. 5,443,528.

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[21] Appl. No.: **232,946**

[22] Filed: **Aug. 19, 1994**

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[63] Continuation of Ser. No. 977,806, Nov. 17, 1992, Pat. No. 5,443,528.

[51] Int. Cl.<sup>6</sup> ..... **A61F 2/66; A61F 2/70**

[52] U.S. Cl. .... **623/52; 623/55; 623/24**

[58] Field of Search ..... **623/47-55**

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### ABSTRACT

[57] A prosthetic foot formed by one continuous coil spring which has a foot center coil section, a heel extension section, and a forefoot extension section. Lateral and medial and torsional movement are accommodated. Energy is absorbed and stored by the prosthetic foot during heel strike in the gait cycle, energy is transferred to the forefoot extension section during foot roll-forward to toe-off in the gait cycle, and energy is released to provide a propelling force on the prosthetic foot at toe-off in the gait cycle. An apparatus allowing the wearer of the prosthetic foot to feel by physical sensation forces being applied to the prosthetic foot is included in one embodiment.

**34 Claims, 7 Drawing Sheets**

