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Body Limb Movement Limiter

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Allen

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(54) **BODY LIMB MOVEMENT LIMITER**

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Related U.S. Application Data

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(51) **Int. Cl.**
A61F 5/00 (2006.01)

(52) **U.S. Cl.** **602/20; 602/5; 602/19**

(58) **Field of Classification Search** **602/5, 602/19, 20, 23; 473/50; 128/873-876, 869, 128/878; 273/317.2**

See application file for complete search history.

(56) **References Cited**

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(57) **ABSTRACT**

A body limb movement limiter restrains the movement of a person's arm so as to protect the person's shoulder or restrains the movement of a person's lower leg with respect to the upper leg so as to protect the person's knee. The device uses a housing having a reel disposed therein with a tether attached thereto and a shear thickening non-Newtonian fluid disposed within the housing so that the fluid acts on the reel during a payout procedure of the tether. The housing is attached to a strap secured about the torso of the person while the free end of the tether is secured about the person's arm. Alternately, a pair of arms are pivotally secured to each other within a housing having the non-Newtonian fluid therein for limiting movement of one arm with respect to the other.

9 Claims, 7 Drawing Sheets

