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(54) **ACTIVE MUSCLE ASSISTANCE DEVICE
AND METHOD**

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(57) **ABSTRACT**

A method for controlling movement using an active powered device including an actuator, joint position sensor, muscle stress sensor, and control system. The device provides primarily muscle support although it is capable of additionally providing joint support (hence the name "active muscle assistance device"). The device is designed for operation in several modes to provide either assistance or resistance to a muscle for the purpose of enhancing mobility, preventing injury, or building muscle strength. The device is designed to operate autonomously or coupled with other like device(s) to provide simultaneous assistance or resistance to multiple muscles.

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