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Robotic Hip Swinger

Tech ID: 18895 / UC Case 2001-476-0

BACKGROUND

Over 700,000 people in the U.S alone suffer strokes each year often resulting in an impairment of walking ability. A popular approach to locomotion rehabilitation called body weight supported (BWS) training shows promise in improving locomotion after strokes. However the technique involves suspending the patient in a harness above a treadmill and manually assisting the legs and hips in a walking pattern. Although effective, this technique is highly labor intensive and thus clinical access is limited.

TECHNOLOGY DESCRIPTION

This invention provides a robotic method of locomotion training without directly touching the subject's legs and still involves shifting a subject's pelvis to aid in the walking motion desired. By optimizing the hip or pelvis swing an optimal leg swing motion is created by moving the pelvis robotically without the need for human contact with the leg thus reducing the labor intensive nature of this crucial therapy.

APPLICATIONS

Stroke therapy, spinal cord injury therapy

PATENT STATUS

Country	Туре	Number	Dated	Case
United States Of America	Issued Patent	7,125,388	10/24/2006	2001-476

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OTHER INFORMATION

CATEGORIZED AS

» Medical

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