

PRODUCT TITLE

Rolling Hemiwalker

INVENTOR

Pete Grevelding PT, MSPT, NCS and Gaylord Hospital, Inc.

MARKET OPPORTUNITY

Hemiwalkers have been utilized for years to assist in walking for people who need maximum stability and can only utilize one upper extremity effectively. Use of a hemiwalker requires the user to lift the device sequentially from the floor in order to advance it forward. This device advancement results in periods of bilateral lower extremity support without external support. As a person typically utilizes this walking aide when one lower extremity is paretic and/or with balance issues, this period of non-device support puts the user at risk for falls. Further, advancement of the walker causes the user to compensate for the weight of the device while it is in the air. This cycle of progression can lend itself to an abnormal gait pattern. In a therapeutic setting, therapists and caregivers strive to normalize the gait cycle, minimize loss of balance and optimize stability. Rolling walkers have been utilized to fulfill this need for nearly as long as hemiwalkers have been used. This product strives to optimize the function of the hemiwalker utilizing the concept of a rolling walker.

SOLUTION

The Rolling Hemiwalker utilizes the standard hemiwalker design, except for the front floor contact points. At the front contact points, the standard feet are replaced by spring-piston wheels. The wheel axel attaches to an internal cylinder enclosed by the structural leg of the hemiwalker. A slide channel in the structural leg allows the axel to travel up and down on the internal cylinder, which is opposed by a spring. Functionally, this allows the user to roll the hemi walker forward (not lifting it off the ground). Then, when the user puts his/her weight on the rolling hemiwalker, the springs compress, allowing the rubber foot of the structural leg to rest on the ground, stabilizing it. When the weight is removed, the spring expands releasing the foot off the floor and allowing the wheel to roll.

VALUE OF PROPOSITION

- Maximizes safety of the person
- Improves gait pattern, reduces energy expenditure
- Simple design upgrade to existing device
- Market opportunities in all rehabilitation settings –gait training, transfers, fall safety, orthopedics

STAGE OF DEVELOPMENT

- Design developed
- Available for non-exclusive and exclusive license

INTELLECTUAL PROPERTY

Status:

Provisional patent application filed

CONTACT INFORMATION

Pete Grevelding

Vice President of Clinical Operations Gaylord Hospital (203)741-3386 pgrevelding@gaylord.org

