Panasonic Develops Bed-Shaped Robot Transformable into Wheelchair to Support People with Limited Mobility to Lead Independent Life

The Robotic Bed will be showcased at H.C.R. 2009

Osaka, Japan - Panasonic Corporation, a leader of electronics technology and innovation, today announced the development of a bed-shaped robot which can be transformable between a bed and a wheelchair with the user staying in bed or wheelchair. The Robotic Bed is designed to help people with limited mobility maintain an independent lifestyle, reducing the need for assistance and expanding their mobility. Panasonic will exhibit this new robot at the 36th International Home Care & Rehabilitation Exhibition (H.C.R. 2009) to be held at Tokyo Big Sight from September 29 to October 1, 2009.

Aiming to bring about secure, safe and comfortable living, Panasonic has been conducting research and development activities in the field of welfare robots that assist human beings. For people who need assistance with daily living activities, it is essential to secure a safe and comfortable way to move on their own to lead an independent life. For care workers, it requires physical exertion to lift and move such a person from the bed to a wheelchair and carries risks of dropping and injuries. The Robotic Bed provides solutions for the both.

As the robot can transform itself from a bed into a wheelchair and vice versa at the command of the user, it eliminates not only the need for the user to transfer between the bed and a wheelchair but also the risks and burden associated with the transfer. The robot can also expand the user’s range of activities. Now, the user can join the family meal by converting the bed into a wheelchair and moving to the dining table without the need of assistance from other people.

The Robotic Bed has been developed with Panasonic’s innovative technologies including a control system that aids safe operation of the robot. The Robotic Bed automatically separates or restores certain components as it is converted into the bed or wheelchair mode. In the wheelchair mode, the robot can detect people and obstacles in its way to safely guide the user to avoid collisions.

Human-robot interface technologies are also employed to facilitate easy operation with no need for training. An interactive interface enables the user to easily transform the bed into the wheelchair. The wheelchair has an intuitive controller that allows the user to easily drive it and give it an instruction to go
back into the bed.

For the comfort of the user, the robot incorporates a posture support technology that enables adjusting and optimizing the mattress to contour to the body shape. The robot also helps the user turn over to prevent bedsores.

The Robotic Bed also features Robotic Canopy, an information interface that allows for viewing television as well as operating home appliances and checking the security camera connected by home network. The display of the Canopy moves according to the user's position and lifts automatically when the robot is converted into the wheelchair mode.

Panasonic participates in a project for developing practical applications of robots that support people's everyday life. It is coordinated by the New Energy and Industrial Technology Development Organization (NEDO), an independent administrative institute in Japan. Panasonic will contribute to formulating safety standards for such robots through the research and development of the Robotic Bed.

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**About Panasonic**
Panasonic Corporation is a worldwide leader in the development and manufacture of electronic products for a wide range of consumer, business, and industrial needs. Based in Osaka, Japan, the company recorded consolidated net sales of 7.77 trillion yen (US$78.4 billion) for the year ended March 31, 2009. The company's shares are listed on the Tokyo, Osaka, Nagoya and New York (NYSE: PC) stock exchanges. For more information on the company and the Panasonic brand, visit the company's website at http://panasonic.net.

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