## OMNI-WHEEL BASED DRIVING DEVICE WITH BELT TRANSMISSION MECHANISM 黄啟光,鍾英漢,王志湖,田慶誠,李柏坤,顏名慶,侯中權,林友雄 Electrical Engineering Engineering tien@chu.edu.tw

## Abstract

An omni-wheel based driving mechanism includes a spherical wheel, a pair of first omni wheels, and a pair of second omni wheels. The first omni wheels are arranged at two sides of the spherical wheel to space from each other by a predetermined distance in a first direction, so that the spherical wheel is rollably positioned between the first omni wheels. The second omni wheels are arranged at another two sides of the spherical wheel to space from each other by a predetermined distance in a second direction, so that the spherical wheel is rollably positioned between the second omni wheels. Therefore, a good driving efficiency can be obtained between the spherical wheel and the first omni wheels and the second omni wheels.

Keyword: Omni, wheel