

Technology: [Manual wheelchair system for improved propulsion and transfers](#)

VA ID Number 12-314

Inventor: Gary Goldish

Location: Minneapolis, MN

Topic: Rehab/Assistive Device

USPTO Issue Date: 12/9/2014

Patent Number: 8,905,421

The VA has a sole ownership interest

Contact: Kerry.leonard@va.gov

Abstract: A manual wheelchair including a frame, a drive wheel connected to the frame, having a first axis of rotation and configured to rotate relative to the frame, a push rim connected to the frame, having a second axis of rotation extending substantially parallel to the first axis of rotation of the drive wheel and configured to rotate relative to the frame, wherein the second axis of rotation of the push rim is offset from the first axis of rotation of the drive wheel in a direction orthogonal to the first axis of rotation of the drive wheel, and a transmission configured to transmit rotation of the push rim to rotation of the drive wheel. Additionally, the wheelchair may also include multispeed fixed-gear hubs for propulsion on different terrain and removable or rotatable push rims for easier transfers.