

ABSTRACT

5 The portable device (10) for rehabilitating an impaired user having difficulties
in executing simultaneous reaching and lifting tasks comprises an armrest
(12) where to the forearm of the user can be fastened and means (16) for
enabling the movement of the armrest on a surface. It furthermore comprises
means (18) for monitoring the movement of the armrest and means (13) for
sensing a force exercised by the arm of the user in an orthogonal direction to
the surface. The device enables the user to conduct reaching movements in
10 a large workspace having the forearm supported and fastened. The fact that
the forearm is supported and fastened to the device allows for better control
of the shoulder training movements, avoiding uncontrolled trajectories at the
level of the elbow that are possible in case only a handle is grasped.