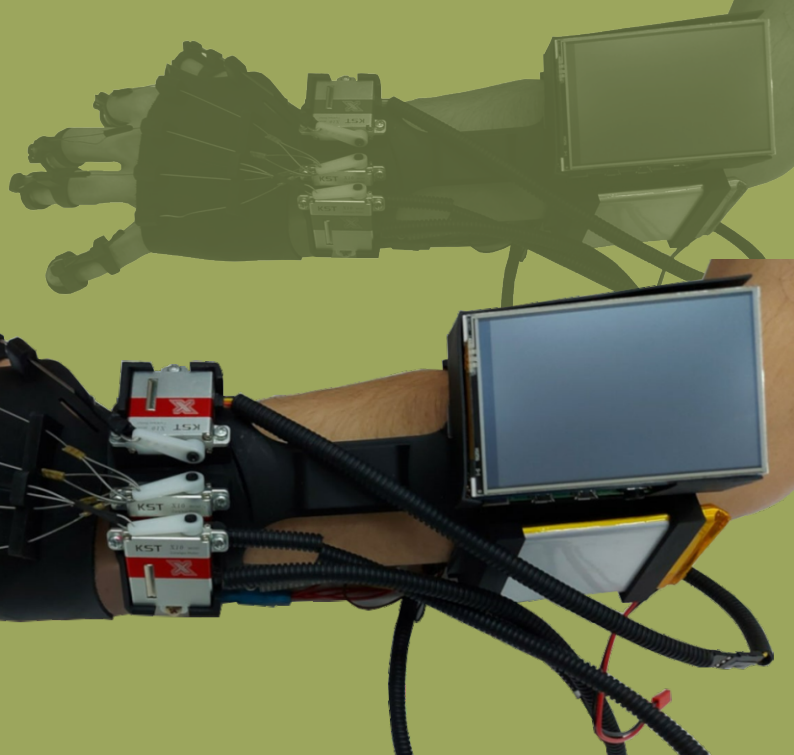




UNIVERSITY
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ORTHOSIS FOR UPPER LIMB REHABILITATION

The orthosis for upper limb rehabilitation is a subject of patent application **P.440617**.

The orthosis is aimed for passive exercises of the fingers and wrist. It can passively support, rehabilitate and aid in the recovery of functional disorders of the upper limb in the area of the fingers, including the thumb and wrist. It can also prevent spasticity after a stroke, haemorrhagic stroke, haemorrhage, or injury and facilitate upper limb movement through periodic and repetitive exercises, enabling the therapy for damage to the nervous system at the same time.

FORM OF COMMERCIALISATION:

- ▶ further development of the device,
- ▶ licence,
- ▶ sale.

Main advantages of the invention:

- ▶ the doctor or physiotherapist can freely adjust the settings as required using the minicomputer controllers;
- ▶ the entire system is secured with a PIN/access code known only to the doctor or physiotherapist, which prevents interference by third parties;
- ▶ the orthosis is equipped with an intuitive graphical interface that automatically launches when the device is switched on;
- ▶ this interface has been designed to enable users to easily manage servo motors that assist the movements of the wrist, fingers and thumb;
- ▶ the microcomputer fitted to the orthosis can be connected to a monitor, mouse and keyboard, giving full access to the programme management, including remote control of the device;
- ▶ the orthosis is manufactured using 3D printing technology, which facilitates precise adjustment to the patient's anatomy.



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