## Hand Exoskeleton device





**INVENTORS:** Massimo Bergamasco,

Antonio Frisoli, Mine Sarac,

Massimiliano Solazzi,

Edoardo Sotgiu

**CO-OWNER:** Istituto Italiano di Tecnologia

Patent Status: Granted

**PRIORITY N°:** 102016000020451

**Priority Date:** 26/02/2016

License: IT

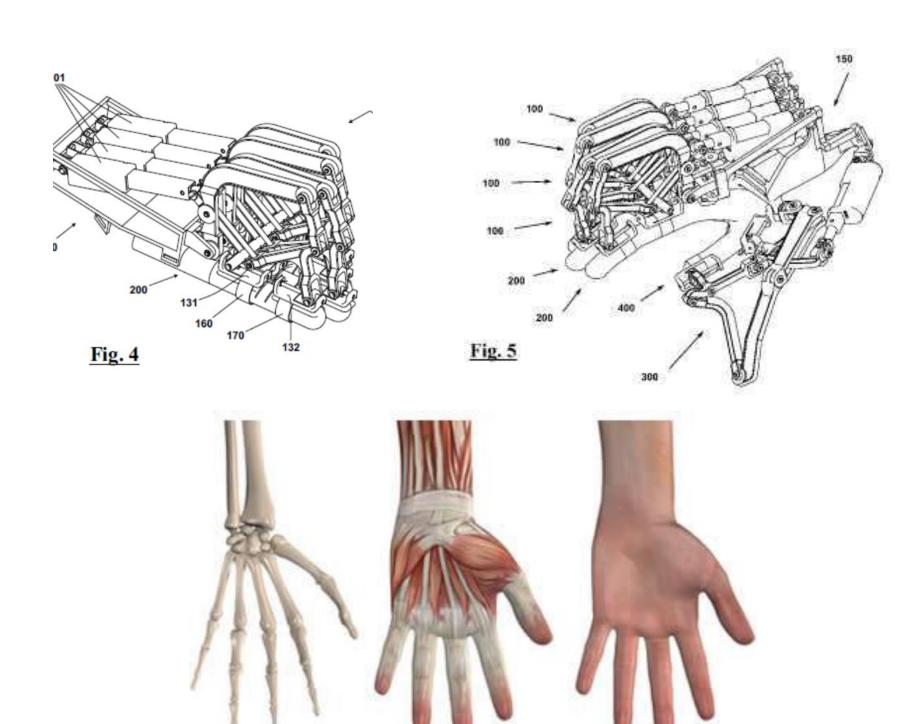
Invention



The invention is in the field of wearable exoskeletons for neuromotor and orthopedic robot assisted rehabilitation, for the guidance of the limbs movement during the daily life and is related to an exoskeleton for the guidance and assistance of flex extension movements of fingers and cylindrical objects grasping. An exoskeleton device able to fit different antropomethric measurements of the user limbs, capable to reduce the undesirable solicitations on the anatomic joints, further than a specific and accurate actuation of each finger phalange, so allowing the grasping of objects even if the shape and measurements are unknown before the grasping, in a safe and confortable easy to wear way, without the need of intial calibration operations.

Drawings & pictures





## Industrial applications



- Disabled patience movement assistance during rehabilitation;
- Teleoperation;
- Aptic applications;

Possible developments



The research group is interested in industrial partners interested in licensing the technology covered by this patent.

For more information:



Scuola Superiore Sant'Anna – Technology Transfer Office

Headquarters: Piazza Martiri della Libertà 33, 56127, Pisa

Web site: www.santannapisa.it

E-mail:uvr@santannapisa.it

For more information:



Ufficio Regionale di Trasferimento Tecnologico

Headquarters: Via Luigi Carlo Farini, 8 50121 Firenze (FI)

E-mail: urtt@regione.toscana.it







