



Maxsens

by tecnalía

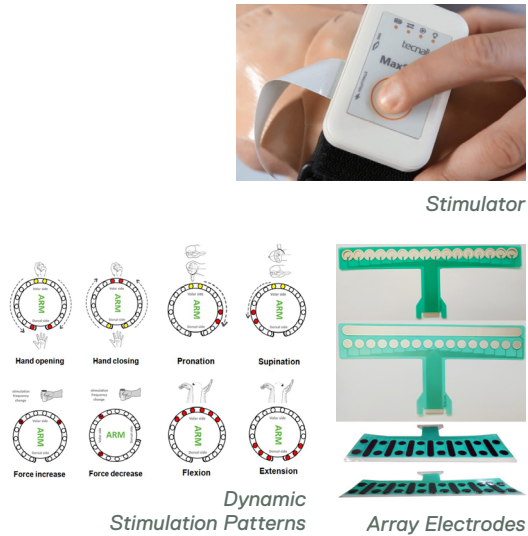
PROPRIOCEPTIVE AND SENSORY
FEEDBACK THROUGH **MULTI-CHANNEL**
ELECTROTACTILE STIMULATION.

MAXSENS IS A STIMULATION DEVICE TO BE INCORPORATED INTO A PROSTHETIC LIMB, WHICH ALLOWS IT TO PROVIDE **SENSORY FEEDBACK TO UPPER LIMB** PROSTHESIS USERS.

COMPONENTS

The stimulation system using our FES array technology is composed of **3 elements**:

- **Stimulator:** Provides multi-channel stimulation with controllable current intensities and stimulation frequencies.
- **Dynamic stimulation patterns:** Embedded intelligence ensures intuitive stimulation protocol and changes in stimuli location and frequency that mimic the movements of prosthesis.
- **Electrodes:** Different types of array electrodes specially designed for sensory stimulation.

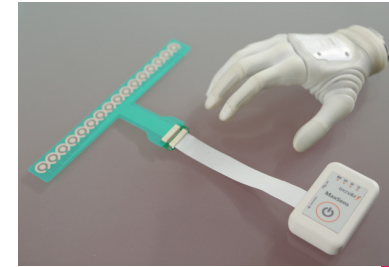


User

Patent Protected Solution

BENEFITS

- Helps amputees to adopt the prosthesis as **part of their own body**.
- Reduces the **phantom limb pain**.
- Provides **real-time feedback** of proprioception and the grasp force.
- Connects **wirelessly** to a PC, Tablet or Smartphone for calibration and setup.
- After minimal training the user is able to recognize 8 prosthesis states with more than **90% accuracy**.
- Intuitive feedback requires **short training time**, performance will increase after prolonged use.
- Increases significantly the **performance of prosthesis**.



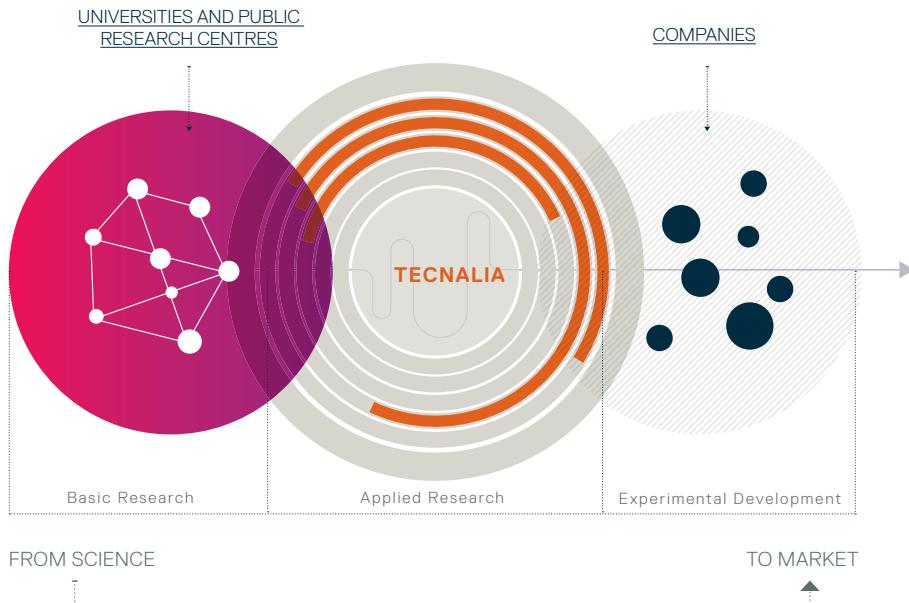
APPLICATIONS

- An add-on to **myoelectric prosthesis**.
- Allows **daily activities** to be performed and perceived in a more natural way.
- Helps to **better control / feel movements** such as hand opening-closing, applied force, flexion-extension and hand rotation.
- Cost competitive and non-invasive solution that allows **easy and simple integration**.



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WE CAN DO SO MUCH TOGETHER

Our work cannot be understood without yours; we would like to work together so your company can compete better. Because together, we can develop technologies which will transform the present.

The future is technological, let's share it!



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