

# DEVICE FOR DIAGNOSIS AND REHABILITATION OF PEOPLE WITH BALANCE FUNCTION DEFICITS

**The invention relates to a kinematic machine for the diagnosis and rehabilitation of patients/users with balance deficiencies or who want to improve their balance.**

## TYPE OF DEVELOPMENT

Medical device.

## DESCRIPTION

A kinematics machine is being developed for diagnosing and rehabilitating patients with balance function deficits. The patient is mounted on the machine, performing pre-programmed movements, which record data about their balance function status. The physician can then design a personalized training plan based on the patient's needs. The machine's sensors, software, and communication system allow healthcare professionals to monitor the patient's progress, create a database for patient history, and apply standard strategies for future patients. This technology will help healthcare professionals better understand and manage patients with balance function deficits.

## INDICATION

Diagnosis and rehabilitation of patients with altered balance function.

## NOVELTY/ADVANTAGES

Currently available machines are focused on balance training for athletes who do not suffer from balance function deficits. The machine we propose here aims to diagnose and rehabilitate patients with impaired balance function, always based on objective data collected during patient testing.

Reference: Oreka



## Research group:

Computational mechanics

## Main researcher:

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## IPR STATUS

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**Applicant:** University of the Basque Country (EHU)

## COOPERATION GOAL

License agreement and development collaboration.