

# MOV

MOV Designs Company

Founded in 2021

Website: [www.movdesigns.com](http://www.movdesigns.com)

ENTREPRENEURSHIP

TECHNOLOGICAL

**MOV** MOV has developed a sonar field sensory band. The device facilitates the spatial orientation of people with visual disabilities without them having to use their hands, helping them to integrate into society and giving them greater independence and security..

## DESCRIPTION

The mobility of people with visual disabilities is hampered by using their limbs (arms and hands), when using the cane as a technical aid for their displacement. These items invasively disrupt haptic development (contact and sensation behaviour) in recognition of physical space. In addition, the constant and repetitive use of the cane leads to long-term diseases, such as carpal tunnel syndrome, tendinitis or bursitis.

The canes currently on the market maintain the same vein as the analogue canes: they cover a visual field from the elbow downwards. While glasses have a limited visual field for mobility, they also promote the stigmatization of people with visual disabilities.

## SOLUTION

MOV is a light and minimally invasive device, a band, which must be placed on the head (as in the image), leaving the hands and arms of the visually impaired free to move. The aim of this technology is to support the independent development of blind people - more than 80,000 in Chile alone - or visually impaired (more than 850,000 in Chile).

The MOV sensory band works by making use of echo-localization, that is, it uses the small vibrations emitted by objects, which are captured by ultrasonic sensors in the cranial atrium and in the occipital bone (nape), allowing its location to be determined, either as a monocular space (as if it were performed by one eye) or binocular (as if it were performed by both eyes).



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## TECHNOLOGY

MOV is in a state of TRL 5 development. The team behind this technology has performed various activities, such as a truncation test in sensors (determining the space mapping parameters), programming in direct proportion (the closer the object is, the greater the vibration) and a vibrator response test. MOV was successfully tested in a closed environment by a visually impaired person to validate the sensors.



MOV has applied for an invention patent in Chile N°202001870.

## MARKET

Size of our market: USD 120 million (2021)  
CAGR:4.5%

Segment: support technologies for visual disability  
Projected market size: USD 170 million (2026)

## BUSINESS MODEL

MOV has three business models:

- Licence for the production and marketing of the device in countries where it has intellectual protection.
- Direct sale in Chile and in areas where intellectual protection has not been obtained.
- Marketing by leasing the device.

## TEAM



**Silvana Herrera**

MOV director  
Designer with a mention in products  
Master in Industrial Design



**Jorge Cartes**

Industrial Director  
Industrial Designer  
M.Sc. MA Innovation Design Engineering



**Eduardo Vergara**

Technology Developer  
Mechatronics Engineer



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