OT-42

Interactive device for simulating Canary LateenSailing navigation

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TYPE OF R+D RESULT

New technology
New product
New service
New knowledge or skill

COMMERCIAL MATURITY LEVEL

Conceptual idea
Proof of concept (design)
Validated in a controlled environment
Validated in a real environment
Successfully implanted

PROTECTION LEVEL

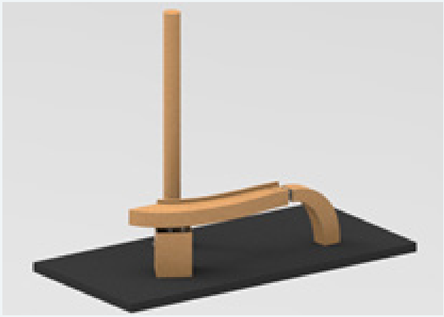
Non- applicable
Patent
Software
Know - how
Utility model

Invention title	Interactive device for simulating Canary Lateen Sailing navigation
File number	ES1248683Y
Priority date	03.12.2020
Status	Granted
Country	Spain

Description of the solution. Problem solved

Canary Lateen sailing dates back to the end of the XIX century at the Puerto de La Luz, where transport of passengers and goods were thriving at the bay. It has evolved to become a sport with strong social roots in the island of Gran Canaria, where there is a wide coverage of the championships and annual regatta.

Due to its popularity, a new simulator device has been developed to help bringing this modality of sailing to all public, attracting not only to local people, but also arising the possible interest about it among visitors and tourists.



In this sense, the invention consists of a support device that simulates Canary Lateen sailing navigation (ES128683), that is intended to simulate a similar experience to the one felt when this discipline is practised.

The device is based on the mechanisms, functions and features of these boats. It is mainly made of a bench, a post and a base. The bench's shape is partially inspired by the geometry of the boat highest and outer part of the boat. Inside, it has a mechanism designed to generate both vertical movements and swinging or fro-and-to movements, which allows to simulate the boat's behaviour at the sea.

This solution has actuators in charge of the movement, as well as inner metallic structural elements to support weight. Such structural elements are covered by panels made from different materials in order to have a resemblance to a wooden boat and to replicate as close as possible the feeling of the waves hitting the boat as it sails.

Also, in order to get a more realistic simulation experience, this device is supported by virtual reality glasses and earplugs for a visual and auditive immersion; a life vest that emulates the essence of the sea breeze; a fan with a nebuliser that replicates the feeling of wind and water when you are sailing; and an interactive screen, that can replace the navigation environment by modifying the images of the place where the simulation is done.

Fields of commercial application

- Sailing schools: actions to promote and introduce Canary Lateen sailing to people.
- Education sector: actions towards dissemination and training about this local sport.
- Leisure and entertainment sector: recreational places, summer camps for children and youngsters.

Market opportunity

Although, Canary Lateen sailing has strong local roots and is mainly practised in the island of Gran Canaria, implementing this device as a supportive element for its dissemination and promotion may provide a further spur to spread its practice among the Gran Canaria population and, even, other islands and coast lands, where practising this modality of sailing may be of interest.

Competitive advantage

Nowadays there are sailing simulators on the market. However, most of these devices only reproduce very basic movements, and generally they are quite limited and at best can rotate around its vertical axis.

Also, there are no mechanical system that simulates the movement of a Canary Lateen sailing boat in the sea.

Therefore, the competitive advantage provided by this device is twofold: it is able to simulate the sea movement in both directions (vertical and horizontal), and it reproduces the real feel of a Canary Lateen sailing boat, more precisely it reproduces the function of being inside the boat.

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