

WATER FILLING DEVICE FOR AQUARIUM

Description:

Aquatic landscaping, also known by its Anglo-Saxon term “Aquascaping”, consists of the design of aquatic landscapes, that is, a miniature habitat that tries to recreate nature itself. To date, Aquascaping lovers have had to use ingenuity when carrying out periodic water changes since there is no tool on the market that effectively fills the aquarium without disturbing the life existing inside. For this reason, the implementation of a system that allows weekly/biweekly water changes without hindering the evolution of the interior ecosystem due to turbulence generated by the outlet of pressurized water is proposed. For this purpose, a water filling device is designed that eliminates turbulence during the filling and oxygenation of water in aquariums, of reduced size and weight, it is also 100% portable and easy to assemble, consisting of at least two pieces. that make it possible to fill the aquarium without breaking or disturbing the internal balance of the tank and its inhabitants. This device allows a fluid, smooth and gradual flow of water, without generating the unwanted lifting of particles from the bottom during the filling action, in addition to oxygenating the water that benefits both fish and plants.

Keywords:

[Water](#), [Aquarium](#), [Fishes](#), [Oxygenated](#), [Turbulence](#)

Sectors:

[Environment and Energy](#), [Fisheries](#), [Agriculture and Marine Resources](#)

Areas:

[Hardware / Devices / Components](#), [Marine and Aquaculture](#)



Advantages:

- 100% effective solution. As it is a device specially designed for its function, it effectively solves the problem, unlike objects that are used impromptu, which cause another series of inconveniences such as water spills, non-suitability for the environment, waste generation, etc.
- Allows slowing down the rate of entry of water into the aquarium and at the same time oxygenate it.
- Reduced and removable size. Portable in a simple pocket.
- Adaptable to different hose diameters.
- Usable in almost any size aquarium.

Uses and Applications:

The invention falls within the field of filling planted aquariums (aquascaping or aquatic landscaping) both in its beginnings and in the weekly water changes that this type of aquarium requires. It prevents the generation of turbulence during the outlet of water from the end of the hose that is inside the tank, avoiding the lifting of particles from the bottom (sand, substrate, plants, etc.) without altering the internal balance of the aquarium (fish, plants, rocks, logs, etc.).

Applicants: Universidad De Málaga

Inventors: Maria Del Carmen Ladron De Guevara Muñoz, M^a Del Carmen Palomo Pérez, Oscar David De Cozar Macias, Elidia Beatriz Blazquez Parra

Filing Date: 19/06/2023

Protection Level: Worldwide (PCT countries)

Processing Status: Worldwide (PCT countries) protection application