

DEVICE FOR WAVE ENERGY CONVERSION

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New hybrid concept of wave energy converter that allows for electricity generation from the Mediterranean Sea waves. Mixing the properties of the point absorber and the oscillating water column (OWC), it harvests the energy from the relative motion between the floating structure and the internal water column.

Protection: Italy

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INVENTION

The given invention avails itself of the type of energy which has been wasted until now. The device consists of a floating structure with a hole in it connecting the ocean through its lower side and the atmosphere through its upper side. The hole, filled with water (moonpool) can be excited in a vertical motion by the incoming waves. The floating structure, in turn, is also excited by waves. A relative motion between them is thus generated, while electricity production is maximised. Wave energy conversion is carried through a specific type of water turbine, eg. Wells or any other power-takeoff.

ADVANTAGES

- Small dimensions;
- Technology applicable to small seas;
- Affordable renewable energy;
- Higher efficiency.

APPLICATIONS

- Suitable for electricity supply in small islands.

CONTACTS

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