

TITLE

Free-floating, Readily Deployable Wave Power Converters

CASE NUMBER

C16469

VALUE PROPOSITION

- » The technology is smaller and free-floating, eliminating the need for expensive personnel and equipment for deployment.
- » The technology is easily deployable and can function immediately upon deployment.

UNMET NEED

- » With oceans covering 71% of the Earth, wave energy is accessible and has potential as a source of renewable energy.
- » For every meter of wave along the shore, the energy density is between 30-40 kW, with a potential of about 2,640 TWh/y in the US alone, a greater energy density than wind and solar.
- » Currently, wave energy conversion devices tend to be large, sedentary, and not easily deployable.
- » There is a strong need for smaller, free-floating, and easily deployable wave energy conversion devices.

TECHNICAL OVERVIEW

- » Researchers at Johns Hopkins have developed a device to convert wave energy that can operate under the surface for long periods of time.
- » The technology is a free-floating wave power device that autonomously performs long-term measurements of ocean properties.
- » Additionally, the device is smaller and more easily deployable than existing devices, eliminating the need for expensive personnel and equipment for deployment.

STAGE OF DEVELOPMENT

- » The invention is in the prototype stage.

ASSOCIATED INVENTORS

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TECHNOLOGY CLASSIFICATION

- » Energy
- » Engineering

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ASSOCIATED REPORTS OF INVENTION (ROIs) AND INTELLECTUAL PROPERTY (IP) FILING NUMBERS

ROI#	TITLE	STATUS	PRIORITY DATE	IP FILING NUMBERS
C16469	Free-floating, Readily Deployable Wave Power Converters	Pending	9/21/2022	US Prov. Appl. 17/949,818