

Title (en)
WAVE ENERGY CONVERTERS UTILIZING PRESSURE DIFFERENCES

Title (de)
WELLENENERGIEUMFORMER MITTELS DRUCKDIFFERENZEN

Title (fr)
HOULOMOTRICES EXPLOITANT DES DIFFERENCES DE PRESSION

Publication
EP 1336051 A1 20030820 (EN)

Application
EP 00936363 A 20000526

Priority
US 0014652 W 20000526

Abstract (en)
[origin: WO0192718A1] An elongated cylinder (10) is fully submerged, in vertical orientation, just below the mean water level of, e.g., and ocean, and of a length, dependent upon surface waves of preselected wavelength, such that the top of the cylinder experiences relatively large pressure variations in response to over passing waves while the bottom of the cylinder experiences an almost steady pressure substantially independent of the over passing waves. The pressure differential over the length of the cylinder is used for causing relative movements between the cylinder and adjoining water, and such relative movements are used for driving a piston (12) of an energy converter. The cylinder can be hollow and in fixed location for causing water movements through the cylinder, or the cylinder can move through the water relative to a fixed transducer. In one version of the movable cylinder, the transducer is fixedly mounted on a fixed in place float disposed within the movable cylinder. In a second version, the transducer is fixedly mounted beneath the movable cylinder on the ocean floor, and the cylinder is coupled to the transducer.

IPC 1-7
F03B 13/12

IPC 8 full level
F03B 13/10 (2006.01); **F03B 13/14** (2006.01)

CPC (source: EP)
F03B 13/10 (2013.01); **F03B 13/142** (2013.01); **Y02E 10/20** (2013.01); **Y02E 10/30** (2013.01)

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