Title (en)

INTERCONNECTED SELF-ORIENTING WAVE ENERGY COLLECTORS

Title (de)

MITEINANDER VERBUNDENE SELBSTAUSRICHTENDE WELLENENERGIEKOLLEKTOREN

Title (fr)

COLLECTEURS D'ÉNERGIE HOULOMOTRICE AUTO-ORIENTABLES INTERCONNECTÉS

Publication

EP 3983666 A4 20240417 (EN)

Application

EP 20831314 A 20200615

Priority

- CA 3047760 A 20190625
- CA 2020000072 W 20200615

Abstract (en)

[origin: CA3047760A1] A wave energy harnessing system comprising of a plurality of wave energy devices coupled together, to form high capacity installation. The wave energy device includes a buoyant body which maintains a permanent orientation relative to the surface of the ocean, while the power take-off (PTO) would self-align in the direction of the incoming waves. The power take-off is completely enclosed, above the waterline and easily accessible. The buoyant body is coupled to the buoyant bodies of other similar wave energy devices by flexible or articulating coupling means. The wave energy devices are arranged in arrays or any other suitable layouts, to form large connected floating structures of desired sizes, and power systems of various capacities. interconnection cables linking the PTOs are secured on cable supports provided between the wave energy devices. Few underwater infrastructures are required. The moorings and the underwater transmission cable are shared by the whole installation.

IPC 8 full level

F03B 13/14 (2006.01); **F03B 13/20** (2006.01); **F03G 3/06** (2006.01); **F03G 7/08** (2006.01)

CPC (source: EP)

F03B 13/20 (2013.01); **F03G 3/06** (2013.01); **F03G 7/08** (2013.01); F05B 2240/40 (2013.01); F05B 2240/85 (2020.08); F05B 2240/965 (2020.08); F05B 2250/44 (2020.08); Y02E 10/30 (2013.01)

Citation (search report)

- [XAI] US 2008093858 A1 20080424 - HENCH STEVEN C [US]
- [A] US 4438343 A 19840320 - MARKEN JOHN P [US]
- [A] US 9617972 B1 20170411 - SKAF ROBERT GEORGES [CA]
- [A] US 2018372061 A1 20181227 - VAMVAS VASSILIOS [US]
- See also references of WO 2020257909A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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CA 3047760 A1 20201225; CN 115023546 A 20220906; EP 3983666 A1 20220420; EP 3983666 A4 20240417; WO 2020257909 A1 20201230

DOCDB simple family (application)

CA 3047760 A 20190625; CA 2020000072 W 20200615; CN 202080033330 A 20200615; EP 20831314 A 20200615