

Title (en)
POWER TAKE-OFF, WAVE ENERGY CONVERTER COMPRISING SUCH POWER TAKE-OFF AND METHOD FOR CONTROLLING SUCH POWER TAKE-OFF

Title (de)
NEBENABTRIEB, WELLENENERGIEWANDLER MIT SOLCH EINEM NEBENABTRIEB UND VERFAHREN ZUR STEUERUNG SOLCH EINES NEBENABTRIEBS

Title (fr)
EXTRACTEUR D'ÉNERGIE, CONVERTISSEUR D'ÉNERGIE HOULOMOTRICE COMPRENANT UN TEL EXTRACTEUR D'ÉNERGIE ET PROCÉDÉ POUR COMMANDER UN TEL EXTRACTEUR D'ÉNERGIE

Publication
EP 3433486 A4 20190227 (EN)

Application
EP 17770714 A 20170322

Priority
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• SE 2017050277 W 20170322

Abstract (en)
[origin: WO2017164803A1] A power take-off device for use in a wave energy converter comprises a buoy (1) and a means (2, 3) for converting linear motion from the movements of the buoy (1) into rotary motion. By providing at least one flywheel arrangement comprising a flywheel (6) and a transmission means (5; 9) with a stiff connection adapted to engage and disengage the flywheel to and from the means (2, 3) for converting linear motion from the movements of the buoy (1) in relation to the frequency of the wave, in different sea states and wave sizes, to increase power capture by matching the natural frequency with the waves to make the buoy resonate, and also to limit end stop forces by de-tuning the natural frequency in large waves and thereby reduce the amplitude of the buoy motion. A method of controlling a power take-off device is also provided.

IPC 8 full level
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Citation (search report)
• [X] WO 2014094778 A1 20140626 - WAVE STAR AS [DK]
• [X] DE 4143011 C1 19930415
• [X] US 2012186244 A1 20120726 - PEDERSEN STEVEN R [US]
• [X] US 2003110767 A1 20030619 - LEE WAI FONG [HK]
• See references of WO 2017164803A1

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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