

Title (en)  
MULTI MODE WAVE ENERGY CONVERTER WITH ELONGATED WAVE FRONT PARALLEL FLOAT HAVING INTEGRAL LOWER SHOALING EXTENSION

Title (de)  
MEHRMODEN-WELLENENERGIEWANDLER MIT LANGGESTRECKTEM WELLENFRONTPARALLELSCHWIMMER MIT INTEGRIERTER UNTERER SHOALING-ERWEITERUNG

Title (fr)  
CONVERTISSEUR D'ÉNERGIE DES VAGUES À MODES MULTIPLES COMPORTANT UN FLOTTEUR À PARALLÈLE DE FRONT DE VAGUE ALLONGÉ À EXTENSION DE HAUT-FOND INFÉRIEURE MONOBLOC

Publication  
**EP 3359806 A4 20190724 (EN)**

Application  
**EP 16854266 A 20161005**

Priority  
• US 201562284640 P 20151005  
• US 2016055605 W 20161005

Abstract (en)  
[origin: WO2017062528A2] A wave barrier or wave terminator type ocean wave energy converter (WEC) utilizing one or multiple adjacent floats together forming an elongated wave front parallel (EWFP) float rotatably connected by at least one swing or drive arm to a secondary floating or shore or seabed fixed body or frame, such that the at least one swing arm is rotating about a submerged pivot point or axle on such body or frame and constraining the motion of the float(s) relative to the body or frame when wave forces are applied against the float(s). Relative to the direction of oncoming wave fronts and relative to the still water line (SWL), the at least one EWFP float is substantially forward of, and above, the pivot point such that the float concurrently moves both upward and rearward on wave crests and returns both forward and downward on ensuing wave troughs. The rear surface of the EWFP float is substantially arcuate and concave with a radius approximating its distance from the pivot point such that the float produces minimal energy consuming back waves when it is being moved by oncoming wave forces. The lower rear arcuate surface of the float can extend below the bottom of the float deeper into the water column to capture additional wave energy.

IPC 8 full level  
**F03B 13/18** (2006.01); **F03B 13/20** (2006.01)

CPC (source: EP)  
**F03B 13/182** (2013.01); **F03B 13/20** (2013.01); **F05B 2240/97** (2013.01); **F05B 2270/18** (2013.01); **Y02E 10/30** (2013.01)

Citation (search report)  
• [XD] US 2015082785 A1 20150326 - ROHRER JOHN W [US]  
• [XD] US 2014097617 A1 20140410 - ROHRER JOHN W [US]  
• [X] US 2013113211 A1 20130509 - ROHRER JOHN [US]  
• [A] US 1887316 A 19321108 - LOCKFAW JOHN A  
• [A] US 2012032446 A1 20120209 - ROHRER JOHN W [US]  
• See references of WO 2017062528A2

Designated contracting state (EPC)  
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