

Title (en)  
MARINE PREDATOR REPELLENT APPARATUS AND SYSTEM

Title (de)  
MEERESRÄUBERABWEHRVORRICHTUNG UND -SYSTEM

Title (fr)  
APPAREIL ET SYSTÈME PERMETTANT DE REPOUSSER DES PRÉDATEURS MARINS

Publication  
**EP 3310160 A4 20190306 (EN)**

Application  
**EP 16810629 A 20160616**

Priority  
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Abstract (en)  
[origin: WO2016201517A1] An apparatus (10) for repelling sharks or seals, has a pulse generating circuit (11) arranged to selectively connect to an output switching circuit (23) to control it to switch a power supply (51) having a direct current voltage of from (80) volts and including capacitance with stored charge capacity of at least 8,000  $\mu$ F, to deliver pulses to at least two electrodes (19, 20). The pulses may be unipolar or bipolar, each unipolar pulse having a pulse width of from 50  $\mu$ S to 1000  $\mu$ S, at said direct current voltage less any voltage drop inherent in said output switching circuit. The apparatus (10) can be connected to arrays of electrodes and associated sensors to protect fish pens from predation and swimming beaches from sharks.

IPC 8 full level  
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CPC (source: EP)  
**A01K 79/02** (2013.01); **A01M 29/24** (2013.01); **H05C 1/04** (2013.01)

Citation (search report)  
• [IY] JP 2006149275 A 20060615 - TECHNO PULSE KK, et al  
• [YA] GB 2505992 A 20140319 - ACE AQUATEC LTD [GB]  
• See references of WO 2016201517A1

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