

Title (en)

WAVE-POWERED, RECIPROCATING HOSE PERISTALTIC PUMP

Title (de)

DURCH WELLENENERGIE ANGETRIEBENE SCHLAUCHPUMPE MIT SICH HIN UND HER BEWEGENDEM SCHLAUCH

Title (fr)

POMPE PERISTALTIQUE HOULOMOTRICE AVEC TUYAU SOUPLE A MOUVEMENT ALTERNATIF

Publication

EP 2324236 A4 20131113 (EN)

Application

EP 09745335 A 20090513

Priority

- CA 2009000649 W 20090513
- CA 2631297 A 20080514

Abstract (en)

[origin: CA2722528A1] A wave-powered peristaltic hose pump, typically installed in a body of fluid upon which waves occur. It is characterized by a peristaltic hose which is reciprocally drawn through one or more anchored compression pulley blocks by opposing buoyant members reacting to undulating wave action. Occlusion of the hose by the compression pulley block causes a reciprocating inflow and outflow of water which is converted to a one-way outflow by a set of valves. When tensile loads are beyond the capabilities of the peristaltic hose itself, it is installed within a low-stretch, flexible support means linked to the opposing buoyant members in a manner which minimizes tensile loading of the peristaltic hose. The apparatus is employed to deliver a flow of pressurized seawater to power driven devices or processes such as but not limited to desalinators, electricity generators, hydraulic motors and hydrogen fuel generators.

IPC 8 full level

F03B 13/14 (2006.01); **F04B 43/12** (2006.01)

CPC (source: EP US)

F03B 13/1865 (2013.01 - EP US); **F03B 13/187** (2013.01 - EP US); **F04B 17/00** (2013.01 - EP US); **F04B 35/004** (2013.01 - EP US); **F04B 43/12** (2013.01 - EP US); **F05B 2240/40** (2013.01 - EP US); **Y02A 20/144** (2017.12 - EP US); **Y02E 10/30** (2013.01 - EP US)

Citation (search report)

- [A] DE 10312371 A1 20040930 - OTTE ERHARD [DE]
- [A] US 4531063 A 19850723 - VIELMO PAOLO [IT], et al
- [A] GB 2002052 A 19790214 - DUNLOP LTD
- [A] US 4077213 A 19780307 - HAGEN GLENN E
- [A] GB 2081389 A 19820217 - ARMSTRONG DON LEIGH
- See references of WO 2009137920A1

Designated contracting state (EPC)

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 SE SI SK TR

DOCDB simple family (publication)

CA 2631297 A1 20091114; CA 2704403 A1 20091119; CA 2722528 A1 20091119; EP 2324236 A1 20110525; EP 2324236 A4 20131113; US 2011081259 A1 20110407; WO 2009137920 A1 20091119

DOCDB simple family (application)

CA 2631297 A 20080514; CA 2009000649 W 20090513; CA 2704403 A 20090513; CA 2722528 A 20090513; EP 09745335 A 20090513; US 73681709 A 20090513