

Title (en)

Double flow-circuit heat exchange device for periodic positive and reverse directional pumping

Title (de)

Wärmetauschervorrichtung mit Doppelfluss-Schaltung zum periodischen Vor- und Rückwärtspumpen

Title (fr)

Dispositif à échange de chaleur à double circuit pour pompage directionnel inverse et positif périodique

Publication

**EP 2148162 A3 20111130 (EN)**

Application

**EP 09251862 A 20090723**

Priority

- US 21947408 A 20080723
- US 29241508 A 20081119

Abstract (en)

[origin: EP2148162A2] The present invention provides a double flow-circuit heat exchange device (1000) for periodic positive and reverse directional pumping, which is disposed with the bi-directional fluid pump (123) capable of producing positive pressure or negative pressure at the fluid port on two sides of the bi-directional heat exchange device (1000) for periodically positive and reverse pumping the two fluid circuits in opposite flowing directions, thereby in the operation of periodically positive and reverse pumping to maintain the two fluid circuits in different flowing directions.

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

- [X] EP 0536445 A1 19930414 - CA BYGG AB [SE]
- [X] WO 03091632 A1 20031106 - OXYCELL HOLDING BV [NL], et al

Cited by

CN110686394A

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 SM TR

Designated extension state (EPC)

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DOCDB simple family (publication)

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DOCDB simple family (application)

**EP 09251862 A 20090723**; CA 2673107 A 20090717; CN 200920167536 U 20090721; JP 2009170719 A 20090722; SG 2009049784 A 20090723