

Title (en)
EXCHANGER DEVICE

Title (de)
AUSTAUSCHER-VORRICHTUNG

Title (fr)
DISPOSITIF ÉCHANGEUR

Publication
EP 2704763 A1 20140312 (DE)

Application
EP 12719665 A 20120502

Priority
• DE 102011100439 A 20110504
• EP 2012057971 W 20120502

Abstract (en)
[origin: CA2830449A1] The invention relates to an exchanger device for transferring mass and/or energy between a first and second medium. The device comprises a chamber which has a first inlet and outlet of the first medium and through which the first medium can flow, and the chamber is equipped with at least one mass- and/or energy-permeable exchanger hollow fiber, preferably a plurality of mass- and/or energy-permeable exchanger hollow fibers, which is/are connected at one end to a second inlet and at the other end to a second outlet of the second medium, wherein the second medium can flow through the fiber(s) and the first medium can flow around the fiber(s). The chamber is equipped with at least one pump element by means of which the first medium can be displaced out of the chamber and sucked into the chamber in a pulsing manner. The pump element has an elastically deformable element and is connected to a third inlet of a third medium that is used as a driving medium, said pump element being expandable by the third medium.

IPC 8 full level
A61M 1/16 (2006.01)

CPC (source: CN EP KR US)
A61M 1/1678 (2013.01 - CN KR); **A61M 1/1698** (2013.01 - CN EP KR US); **A61M 1/267** (2014.02 - CN EP KR US);
A61M 1/3623 (2022.05 - CN EP US); **A61M 60/113** (2021.01 - CN EP KR US); **A61M 60/37** (2021.01 - CN EP KR US);
A61M 60/38 (2021.01 - CN EP KR US); **A61M 60/427** (2021.01 - CN EP KR US); **A61M 60/546** (2021.01 - CN EP KR US);
A61M 60/853 (2021.01 - CN EP KR US); **A61M 1/1678** (2013.01 - EP US)

Citation (search report)
See references of WO 2012150233A1

Citation (examination)
US 2008171960 A1 20080717 - BRIESKE GERHARD [DE], et al

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

DOCDB simple family (publication)
DE 102011100439 A1 20121108; AU 2012251678 A1 20130919; AU 2012251678 B2 20150122; CA 2830449 A1 20121108;
CN 103501833 A 20140108; EA 201301119 A1 20140130; EP 2704763 A1 20140312; JP 2014518696 A 20140807;
KR 20140015437 A 20140206; US 2014061116 A1 20140306; WO 2012150233 A1 20121108

DOCDB simple family (application)
DE 102011100439 A 20110504; AU 2012251678 A 20120502; CA 2830449 A 20120502; CN 201280014054 A 20120502;
EA 201301119 A 20120502; EP 12719665 A 20120502; EP 2012057971 W 20120502; JP 2014508770 A 20120502;
KR 20137026177 A 20120502; US 201214115221 A 20120502