

Title (en)
Production d'énergie à partir de chaleur à basse température

Title (de)
Energiegewinnung aus Niedertemperaturwärme

Title (fr)
Energy generation from low temperature heat

Publication
EP 2557279 A3 20131106 (DE)

Application
EP 12005615 A 20120802

Priority
DE 102011109777 A 20110809

Abstract (en)
[origin: EP2557279A2] The method involves pumping working fluid (1) circulating in a rankine cycle to pressure above critical pressure of the fluid prior conducting heat exchange between the fluid and an external medium (A) e.g. hot water. The working fluid is heated during the heat exchange. The heated working fluid (4) is expanded and condensed, where maximum pressure of the fluid is controlled by an expander (X1) and/or a pump (P1). The expander is controllable with respect to mass flow rate of the expanded working fluid (5), and the pump is controllable with respect to a mass flow rate of the pumped fluid. The working fluid comprises propane, propylene or a mixture of propane and propylene and water or ammonia.

IPC 8 full level
F01K 13/02 (2006.01); **F01K 25/10** (2006.01)

CPC (source: EP US)
F01K 13/02 (2013.01 - EP US); **F01K 25/10** (2013.01 - EP US)

Citation (search report)

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- [IDY] US 2004107700 A1 20040610 - MCCLANAHAN TIMMONS S [US], et al
- [Y] EP 0042752 A2 19811230 - POPE WILLIAM L [US], et al
- [Y] US 2011167818 A1 20110714 - TSUCHINO KAZUNORI [JP], et al
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DE102014017802A1; EP2604814B1

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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 2557279 A2 20130213; EP 2557279 A3 20131106; DE 102011109777 A1 20130214; US 2013036737 A1 20130214; ZA 201205994 B 20130529

DOCDB simple family (application)
EP 12005615 A 20120802; DE 102011109777 A 20110809; US 201213569592 A 20120808; ZA 201205994 A 20120808