

Title (en)
SYSTEMS AND METHODS FOR CONVERTING THERMAL ENERGY

Title (de)
VERFAHREN UND VORRICHTUNG ZUR UMWANDLUNG VON THERMISCHER ENERGIE

Title (fr)
SYSTEMES ET PROCEDES DE TRANSFORMATION DE L'ENERGIE THERMIQUE

Publication
EP 1075630 A4 20030502 (EN)

Application
EP 97946553 A 19971110

Priority
US 9720229 W 19971110

Abstract (en)
[origin: WO9924766A1] The present invention provides devices and methods for obtaining mechanical, electrical and cooling power from a high temperature heat source (80), which maybe intermittent, and an ambient temperature heat source (130). In one embodiment of the invention, the working fluid (100) passes through a fluid circuit including a first vaporizer (10), an expansion device (30) for providing useful mechanical power from the vaporized liquid, a first heat exchanger (40) for cooling the high pressure vaporized liquid, a reservoir for collecting (50), by gravity, the high pressure vaporized liquid, a first valve (60) leading to a second heat exchanger (260), which may or may not be necessary, leading by gravity flow to a second valve (70), allowing the cool, low pressure liquid to drain back by gravity to the first vaporizer. In this embodiment, the first vaporizer is heated by a high temperature heat source, and the expansion device provides mechanical power to an electric generator.

IPC 1-7
F25B 27/00; **F01K 25/08**

IPC 8 full level
F01K 25/08 (2006.01); **F01K 25/10** (2006.01); **F25B 27/00** (2006.01)

CPC (source: EP)
F01K 25/08 (2013.01); **F01K 25/10** (2013.01); **F25B 27/00** (2013.01)

Citation (search report)

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- [X] US 4686831 A 19870818 - SILVA ROBERT E
- [Y] WO 8502881 A1 19850704 - LIPOVETZ IVAN, et al
- See references of WO 9924766A1

Designated contracting state (EPC)
AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
WO 9924766 A1 19990520; AU 5170498 A 19990531; EP 1075630 A1 20010214; EP 1075630 A4 20030502

DOCDB simple family (application)
US 9720229 W 19971110; AU 5170498 A 19971110; EP 97946553 A 19971110