

Title (en)  
INSTALLATION FOR HARNESSING THERMAL ENERGY

Publication  
**EP 0252137 B1 19930317 (DE)**

Application  
**EP 87900725 A 19861223**

Priority  
DE 3545936 A 19851223

Abstract (en)  
[origin: WO8703932A1] In an installation for harnessing thermal energy, a working fluid is forced during the first part of a working cycle out of a first chamber into a second chamber in which prevails a higher temperature than in the first one, and during a second part of the working cycle the working fluid is again forced back from the second chamber into the first one. Thermal energy is supplied to the working fluid during its passage from the first to the second chamber and removed during its passage from the second to the first chamber. The chambers are formed by the variable volume working chambers of piston engine units (10, 12, 14, 16) coupled to each other, working out-of-phase, which are linked to each other by fluid ducts (18, 20, 22, 24) in such a way that working fluid is forced out of a shrinking working chamber with a relatively high temperature through a first duct into an expanding working chamber with a lower temperature and at the same time working fluid is forced out of a shrinking working chamber with a lower temperature through a second duct into an expanding chamber with a higher temperature. The piston engine units work as a whole at a specific temperature level, this avoiding the occurrence of thermal insulation problems.

IPC 1-7  
**F02G 1/04; F25B 9/00**

IPC 8 full level  
**F02G 1/04** (2006.01); **F02G 1/044** (2006.01); **F25B 9/00** (2006.01); **F25B 9/14** (2006.01); **F25B 27/00** (2006.01)

CPC (source: EP US)  
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