

Title (en)

Two-phase thermal energy conversion system.

Title (de)

Zwei-Phasen-System für thermische Energie-Konversion.

Title (fr)

Système biphasique de conversion d'énergie thermique.

Publication

**EP 0052674 A1 19820602 (EN)**

Application

**EP 80304110 A 19801114**

Priority

EP 80304110 A 19801114

Abstract (en)

The system employs an evaporable liquid, such as water, and a gas which is not liquefiable within the operating temperature and pressure ranges, such as air. Hot water from source 10 is supplied by pump 16 through valve 18 to evaporator 12 where it is sprayed into air supplied by pump 23 through valve 24. The resulting increase in pressure or volume drives prime mover 14 (turbine or reciprocating piston engine) which in turn drives generator 15. The control device 36 receives inputs from sensors and controls valves 18 and 24 to achieve saturation in the evaporator 12. If the water consists of salt water, fresh water is derived as a condensation product from the prime mover.

IPC 1-7

**F01K 21/04**

IPC 8 full level

**F01K 21/04** (2006.01)

CPC (source: EP)

**F01K 21/04** (2013.01); **F01K 21/042** (2013.01); **F01K 21/047** (2013.01)

Citation (search report)

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- US 3878680 A 19750422 - DAUVERGNE HECTOR A
- US 4085591 A 19780425 - BISSELL LAWRENCE E
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DE102013013554A1; GB2269634A; GB2269634B; EP2854267B1

Designated contracting state (EPC)

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DOCDB simple family (publication)

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