

Title (en)  
LOW-TEMPERATURE HEAT ENGINE

Title (de)  
NIEDERTEMPERATUR-WÄRMEKRAFTMASCHINE, NIEDERTEMPERATURMOTOR NTM BZW. TIEFTEMPERATURMOTOR

Title (fr)  
MOTEUR THERMIQUE A BASSE TEMPERATURE, MOTEUR A BASSE TEMPERATURE

Publication  
**EP 0775250 A1 19970528 (DE)**

Application  
**EP 94924714 A 19940704**

Priority  
EP 9402179 W 19940704

Abstract (en)  
[origin: WO9601363A1] The invention concerns a low-temperature engine which obtains, operating at a low temperature, mechanical energy from thermal energy. It can be designed as a compact unit as well as in component form. A liquefied gas is pumped under high pressure by a multi-cylinder pump (1) in a closed circuit into an evaporator (4) where it is evaporated by the supply of heat (e.g. waste heat or heat from the surroundings). The vapour thus formed is passed into an expansion device (8) where the large pressure drop causes it to be supercooled and liquefied. The gas can flow past the expansion device through a bypass line (25). The liquefied gas can overflow into a bypass line (45). The fields of application of the engine are comparable with those of existing internal-combustion engines (vehicle propulsion, stationary drive units and power generation). A further application is the use of the low-temperature engine as a refrigerating machine.

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**F01K 25/10**

IPC 8 full level  
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See references of WO 9601362A1

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**EP 9502578 W 19950703**; AU 2926795 A 19950703; AU 7490894 A 19940704; DE 4481032 T 19940704; EP 9402179 W 19940704; EP 94924714 A 19940704; EP 95924967 A 19950703