

Title (en)  
THERMODYNAMIC MACHINE AND METHOD FOR THE OPERATION THEREOF

Title (de)  
THERMODYNAMISCHE MASCHINE SOWIE VERFAHREN ZU DEREN BETRIEB

Title (fr)  
MACHINE THERMODYNAMIQUE ET PROCÉDÉ DE FONCTIONNEMENT

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Abstract (en)  
[origin: WO2011057724A2] The invention relates to a thermodynamic machine (1), comprising a circulation system (2) in which a working fluid (10), in particular a low-boiling working fluid (10), circulates alternately in a gaseous and a liquid phase, a heat exchanger (3), an expansion machine (5), a condenser (6) and a fluid pump (8). The invention also relates to a method for operating said thermodynamic machine. According to the invention, in the flow line of the fluid pump (8) a partial pressure increasing the system pressure is applied to the liquid working fluid (10) by adding a non-condensing auxiliary gas (20). Compact ORC machines can be implemented, preventing cavitation in the liquid working fluid (10).

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