

Title (en)
SYSTEM AND METHOD FOR RECOVERING WASTE HEAT ENERGY

Title (de)
SYSTEM UND VERFAHREN ZUR RÜCKGEWINNUNG VON ABWÄRMEENERGIE

Title (fr)
SYSTÈME ET PROCÉDÉ POUR RÉCUPÉRER DE L'ÉNERGIE THERMIQUE PERDUE

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Application
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Abstract (en)
[origin: WO2016039655A1] The present invention provides a system (1) for recovering or utilizing waste heat energy from a waste heat source (S). The system (1) comprises: a first heat engine (H1) having a first working fluid (F1), especially carbon-dioxide (CO₂), and defining a first circuit (A) for circulation of the first working fluid (F1). The first heat engine (H1) is configured and arranged for transferring heat from the waste heat source (S) to the first working fluid (F1). The system (1) further includes a second heat engine (H2), especially an organic Rankine cycle (ORC) heat engine, having a second working fluid (F2) and defining a second circuit (B) for circulation of the second working fluid (F1). The second heat engine (H2) is configured and arranged for transfer of heat from the first working fluid (F1) to the second working fluid (F2), especially for cooling the first working fluid (F1) after an expansion thereof in a turbine (T1) of the first heat engine. The invention also provides a corresponding method of waste heat recovery.

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Citation (examination)
• WO 9524822 A2 19950921 - NAYAR RAMESH CHANDER [US]
• WO 2011030285 A1 20110317 - OCHSE ANDREW [ZA], et al

Cited by
EP3587752A4

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