

Title (en)
DEFROSTING A HEAT PUMP SYSTEM WITH WASTE HEAT

Title (de)
ABTAUEN EINES WÄRMEPUMPENSYSTEMS MIT ABWÄRME

Title (fr)
DÉGIVRAGE D'UN SYSTÈME DE POMPE À CHALEUR PAR CHALEUR PERDUE

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Application
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Priority
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Abstract (en)
[origin: EP3546854A1] The invention relates to a heat pump system (1) with a refrigerant circuit (2), where, via a refrigerant, heat is transferred between a first environment (4) and a second environment (5), the refrigerant circuit (2) comprising a compressor (6) for compressing the refrigerant, a first heat exchanger (7) for transferring heat between the first environment (4) and the refrigerant circuit (2), a second heat exchanger (8) for transferring heat between the second environment (5) and the refrigerant circuit (2), where the first heat exchanger (7) is configured to operate as a condenser to cool the refrigerant in a heating mode, and the second heat exchanger (8) is configured to operate as an evaporator in the heating mode, and a compressor driver (3) electrically coupled with the compressor (6) for powering the compressor (6), wherein the refrigerant circuit (2) comprises a heat storage means (11) with a heat storage medium, the heat storage means (11) being thermally coupled with the compressor (6) or the compressor driver (3) and being configured to store heat generated by the compressor (6) or the compressor driver (3) in the heating mode and to transfer the stored heat to the refrigerant in a defrost mode of the refrigerant circuit (2) in order to improve the efficiency of the heat pump system (1).

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