

Title (en)
HEAT PUMP LAUNDRY DRYER

Title (de)
WÄRMEPUMPENTROCKNER

Title (fr)
SÈCHE-LINGE À POMPE À CHALEUR

Publication
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Application
EP 13789565 A 20131113

Priority
EP 2013073694 W 20131113

Abstract (en)
[origin: WO2015070897A1] The present invention relates to a laundry dryer (1) comprising a casing (2) supporting a drying chamber (3) for receiving a load to be dried; a process air conduit (11) in communication with the drying chamber (3) where a process air stream is apt to flow and including an air duct (11a); a heat pump (30) having a heat pump circuit in which a refrigerant (R) can flow, said heat pump circuit including a first heat exchanger (31) where the refrigerant is cooled off and the process air stream is heated up, and a second heat exchanger (32) where the refrigerant is heated up and the process air is cooled off. The first and/or second heat exchanger are thermally coupled to the process air conduit (11) to perform heat exchange between said refrigerant flowing in said heat pump circuit and said process air stream; said first and/or second heat exchanger (31; 32) further comprising at least one heat exchanger module (10). The module includes an inlet header (5a; 5b) to direct a flow of said refrigerant into said module (10) and at least two outer headers (66a, 66b), fluidly separated from each other, each of which is apt to discharge a flow of said refrigerant from said module (10); or at least two inlet headers (5a, 5b), fluidly separated from each other, each of which is apt to direct a flow of said refrigerant into said module (10) and an outer header (66a; 66b) to discharge a flow of said refrigerant from said module; and a plurality of heat exchange layers (8) fluidly connecting said inlet(s) (5a; 5b) to said outlet header(s) (6a; 6b) to enable said refrigerant (R) to flow from said inlet(s) to said outlet header(s) and/or vice versa; said layers (8) being stacked one above the other(s) in a stacking direction (Z) and each heat exchange layer including a plurality of channels (7).

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• JP 2008237390 A 20081009 - SANYO ELECTRIC CO
• WO 2013089179 A1 20130620 - DAIKIN IND LTD [JP]

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