

Title (en)  
APPLIANCE INCLUDING A HEAT PUMP

Title (de)  
ANWENDUNG MIT EINER WÄRMEPUMPE

Title (fr)  
APPAREIL COMPRENANT UNE POMPE À CHALEUR

Publication  
**EP 2877792 A1 20150603 (EN)**

Application  
**EP 13740225 A 20130712**

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Abstract (en)  
[origin: EP2690379A1] The invention relates to an appliance (1) including a treating chamber (3) in which a process medium is introduced; a heat pump (6) having a refrigerant circuit (68) in which a refrigerant can flow, the refrigerant circuit including a first heat exchanger (61) where the refrigerant is cooled off and said process medium is warmed up, a second heat exchanger (62) where the refrigerant is heated up, a compressor (63) to pressurize and circulate the refrigerant through the refrigerant circuit, the compressor including a lubricant, and a pressure-lowering device (64). The first and second heat exchanger, compressor and pressure-lowering device are operatively connected through refrigerant circuit piping (65) into which the refrigerant is apt to flow. The refrigerant circuit piping (65) comprises at least a narrow piping portion having a narrow hydraulic diameter ( $D_{Hnarrow}$ ), and the ratio between the narrow hydraulic diameter ( $D_{Hnarrow}$ ) and the hydraulic diameter ( $D_H$ ) of the remaining piping portions of the refrigerant circuit piping (65) is comprised between 0.4 and 0.95. The at least one narrow piping portion being located in at least one of: - between an outlet of the second heat exchanger (62) and an inlet of the compressor (63a), or - Between an outlet of the first heat exchanger (61) and an inlet of the pressure-lowering device (64), or - Between an outlet of the pressure-lowering device (64) and an inlet of the second heat exchanger (62), or - below or at the suction inlet level (L) of the compressor (63).

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