

Title (en)
A heat pump system for a laundry dryer

Title (de)
Wärmepumpensystem für Wäschetrockner

Title (fr)
Système de pompe à chaleur pour sèche-linge

Publication
EP 2551401 A1 20130130 (EN)

Application
EP 11175681 A 20110728

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Abstract (en)

The present invention relates to a heat pump system for a laundry dryer, said heat pump system comprises a refrigerant circuit (10) for a refrigerant and an air stream circuit (12) for an air stream. The refrigerant circuit (10) includes a compressor (14), a first heat exchanger (16), lamination means (18) and a second heat exchanger (22) connected in series and forming a loop. The air stream circuit (12) includes the first heat exchanger (16), a laundry drum (26), at least one air stream fan (26) and the second heat exchanger (22) connected in series and forming a closed loop. The refrigerant circuit (10) and the air stream circuit (12) are thermally coupled by the first heat exchanger (16) and the second heat exchanger (22). The compressor (14) is formed as a multi-stage compressor or as a plurality of serial compressors. The refrigerant circuit (10) includes at least one series of further lamination means (20) and a third heat exchanger (24). The compressor (14) includes an intermediate connection arranged between the stages of the multi-stage compressor or between the serial compressors, respectively. The inlet of the further lamination means (20) is connected to the outlet of the first heat exchanger (16). The outlet of the third heat exchanger (24) is connected to the intermediate connection of the compressor (14).

IPC 8 full level
D06F 58/20 (2006.01)

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Citation (search report)

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