

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 2551402 A1 20130130 (EN)**

Application  
**EP 11175739 A 20110728**

Priority  
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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 (20) and a second heat exchanger (24) 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 (24) 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 (24). 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 a third heat exchanger (18) and further lamination means (22). The compressor (14) includes an intermediate connection arranged between the stages of the multi-stage stage compressor or between the serial compressors, respectively. The intermediate connection of the compressor (14) is connected to the inlet of the third heat exchanger (18). The outlet of the further lamination means (22) is connected to the inlet of the second heat exchanger (24).

IPC 8 full level  
**D06F 58/20** (2006.01)

CPC (source: EP US)  
**D06F 58/206** (2013.01 - EP US)

Citation (search report)  
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