

Title (en)
A laundry dryer with heat pump system

Title (de)
Wäschetrockner mit Wärmepumpensystem

Title (fr)
Sèche-linge avec système de pompe à chaleur

Publication
EP 2540905 A1 20130102 (EN)

Application
EP 11171923 A 20110629

Priority
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Abstract (en)
The present invention relates to a laundry dryer or a spinner-washer with a heat pump system. The heat pump system comprises a refrigerant circuit (10) for a refrigerant and a drying air circuit (12) for an air stream. The refrigerant circuit (10) includes a compressor (14), a first heat exchanger (16), expansion means (18) and a second heat exchanger (20) connected in series and forming a closed loop. The drying air circuit (12) includes the first heat exchanger (16), at least one air stream fan (30), a laundry drum (28) and the second heat exchanger (20) connected in series and forming a closed loop. The refrigerant circuit (10) and the drying air circuit (12) are thermally coupled by the first heat exchanger (16) and the second heat exchanger (20). The first heat exchanger (16) is provided for heating up the air stream and cooling down the refrigerant. The second heat exchanger (20) is provided for cooling down the air stream and heating up the refrigerant. The refrigerant circuit (10) includes at least one additional heat exchanger (22) connected between the outlet of second heat exchanger (20) and the inlet of the compressor (14) and is controlled or controllable by the temperature of the refrigerant in at least one position of the refrigerant circuit (10) and/or by the temperature of the drying air.

IPC 8 full level
D06F 58/20 (2006.01)

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

Citation (applicant)
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Citation (search report)
• [X] EP 1811076 A1 20070725 - SANYO ELECTRIC CO [JP]
• [X] US 2005066538 A1 20050331 - GOLDBERG MICHAEL [US], et al
• [X] US 2005198852 A1 20050915 - ONO KOJI [JP], et al
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