

Title (en)
A heat pump laundry dryer

Title (de)
Wärmepumpe für einen Wäschetrockner

Title (fr)
Sèche-linge à pompe à chaleur

Publication
EP 2527522 B1 20131225 (EN)

Application
EP 11167567 A 20110526

Priority
EP 11167567 A 20110526

Abstract (en)
[origin: EP2527522A1] A laundry dryer with heat pump system, wherein the heat pump system comprises a closed refrigerant circuit for a refrigerant, the refrigerant circuit includes at least one compressor (10), at least one gas cooler (12), at least one expansion means (14) and at least one evaporator/gas heater (16), the refrigerant circuit is thermally coupled to a drying air circuit of the laundry dryer by the gas cooler (12) and the evaporator/gas heater (16), the gas cooler (12) is a heat exchanger and provided for heating up the drying air stream and cooling down the refrigerant, and the evaporator/gas heater (16) is a heat exchanger and provided for dehumidifying the drying air and heating up the refrigerant, the refrigerant circuit comprises a low pressure side between the outlet of the expansion means (14) and the inlet of the compressor (10), the refrigerant circuit comprises a high pressure side between the outlet of the compressor (10) and the inlet of the inlet of expansion means (14), wherein the refrigerant operates at supercritical conditions in the low pressure side of the refrigerant circuit after a transient sub-critical phase, wherein the laundry dryer comprises at least one refrigerant trap (18) fluidly connected or connectable to at least one part of the refrigerant circuit and valve means (20, 22, 24, 26) to selectively connect and/or disconnect the refrigerant trap (18) to said least one part of the refrigerant circuit

IPC 8 full level
D06F 58/20 (2006.01); **D06F 34/26** (2020.01)

CPC (source: EP US)
D06F 58/206 (2013.01 - EP US); **D06F 34/26** (2020.02 - EP US)

Cited by
CN106567237A; DE102015203682A1; CN106440545A; CN105466078A; EP3184934A4

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
EP 2527522 A1 20121128; EP 2527522 B1 20131225

DOCDB simple family (application)
EP 11167567 A 20110526