

Title (en)

LAUNDRY DRYER INCLUDING A HEAT PUMP SYSTEM

Title (de)

WÄSCHETROCKNER MIT EINEM WÄRMEPUMPENSYSTEM

Title (fr)

SÈCHE-LINGE COMPRENANT UN SYSTÈME DE POMPE À CHALEUR

Publication

EP 3617393 A1 20200304 (EN)

Application

EP 18191847 A 20180830

Priority

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Abstract (en)

The present invention relates to a dryer (1) including# a treating chamber (3) where items are introduced and treated with a process air flow;# a heat pump system (30) having a refrigerant circuit in which a refrigerant can flow, said refrigerant circuit including a first heat exchanger (32) where the refrigerant is heated up, a second heat exchanger (31) where the refrigerant is cooled off, a compressor (33) to pressurize and circulate the refrigerant through the refrigerant circuit, and a pressure-lowering device; said first and/or second heat exchanger being apt to perform heat exchange between said refrigerant flowing in said refrigerant circuit and said process air; the refrigerant being a flammable refrigerant;# wherein each of said first and second heat exchanger (32, 31): ■ is a finned tube heat exchanger comprising a tube (40) having multiple sections (41) one above the other and a plurality of fins (50); ■ is divided in three portions: a central portion (60) wherein said multiple sections of the tube (40) are in contact with said plurality of fins (50), and a first and second end portions where said tube is not in contact with the plurality of fins; ■ defines a thickness (tevap, tcondens) of said central portion (60) along a thickness direction (Y);# and wherein the value of the ratio (tcondens/tevap) between a thickness of the central portion (60) of the second heat exchanger (31) and a thickness of the central portion (60) of the first heat exchanger (31) is lower than 1.

IPC 8 full level

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CPC (source: CN EP US)

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Citation (applicant)

EP 3066406 B1 20180110 - BSH HAUSGERAETE GMBH [DE]

Citation (search report)

- [Y] EP 2881514 A1 20150610 - MIELE & CIE [DE]
- [YD] EP 3066406 B1 20180110 - BSH HAUSGERAETE GMBH [DE]
- [YA] EP 2980305 A1 20160203 - MIELE & CIE [DE]

Cited by

EP3896210A1; EP3896211A1; US2022282424A1; US11814781B2

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