

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

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Application

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Priority

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Abstract (en)

[origin: EP3617393A1] 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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Cited by

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