

Title (en)

DEVICE FOR USE WITH A REFRIGERANT FLUID FOR INCREASING THERMODYNAMIC PERFORMANCE

Title (de)

VORRICHTUNG ZUR VERWENDUNG MIT EINER KÜHLFLÜSSIGKEIT ZUR ERHÖHUNG DER THERMODYNAMISCHEN LEISTUNG

Title (fr)

DISPOSITIF UTILISABLE AVEC UN FLUIDE FRIGORIGÈNE POUR L'AUGMENTATION DU RENDEMENT THERMODYNAMIQUE.

Publication

**EP 3071901 A1 20160928 (FR)**

Application

**EP 14824055 A 20141121**

Priority

- FR 1361499 A 20131122
- FR 2014052983 W 20141121

Abstract (en)

[origin: WO2015075390A1] A heat pump comprising a closed circuit intended to contain a refrigerant fluid and a lubricant miscible with the refrigerant fluid, the closed circuit comprising a fluid compressor (1) and a fluid return circuit for returning fluid to the compressor, the compressor extending in the closed circuit between a fluid inlet and a fluid outlet, the return circuit extending in the closed circuit, in addition to the compressor, between the fluid outlet and the fluid inlet, the return circuit comprising a condenser (2), an expander (3) and an evaporator (4), said return circuit comprising a first pipe extending between the fluid outlet and the condenser, a second pipe extending between the condenser and the expander, a third pipe extending between the expander and the evaporator, and a fourth pipe extending between the evaporator and the fluid inlet, said closed circuit comprising a first bulge (5) in a pipe of the return circuit, in series in the circuit, containing tubes (50) in parallel in the circuit, and a second bulge (6) in a pipe of the return circuit, in series in the circuit.

IPC 8 full level

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**F25B 31/00** (2013.01 - RU); **F25B 31/004** (2013.01 - EP KR US); **F25B 45/00** (2013.01 - US); **F25B 2400/121** (2013.01 - KR);  
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Cited by

FR3145206A1; WO2024156698A1

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BA ME

DOCDB simple family (publication)

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BR 112016011696 B1 20220329; CN 106104175 A 20161109; CN 106104175 B 20200121; EP 3071901 A1 20160928;  
EP 3071901 B1 20200318; ES 2799441 T3 20201217; FR 3013811 A1 20150529; FR 3013811 B1 20190607; HR P20200957 T1 20201002;  
JP 2016539312 A 20161215; JP 6364089 B2 20180725; KR 102246122 B1 20210430; KR 20160088402 A 20160725; PL 3071901 T3 20201102;  
RU 2016124582 A 20171227; RU 2677316 C1 20190116; SI 3071901 T1 20200831; US 10508840 B2 20191217; US 2016290686 A1 20161006

DOCDB simple family (application)

**FR 2014052983 W 20141121**; AU 2014351645 A 20141121; BR 112016011696 A 20141121; CN 201480073744 A 20141121;  
EP 14824055 A 20141121; ES 14824055 T 20141121; FR 1361499 A 20131122; HR P20200957 T 20200617; JP 2016554920 A 20141121;  
KR 20167016346 A 20141121; PL 14824055 T 20141121; RU 2016124582 A 20141121; SI 201431591 T 20141121;  
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