

Title (en)

Device combining internal heat exchanger and accumulator for an air conditioning circuit

Title (de)

Vorrichtung, die einen inneren Wärmetauscher und Akkumulator für einen Kreislauf einer Klimaanlage kombiniert

Title (fr)

Dispositif combiné d'échangeur de chaleur interne et d'accumulateur pour un circuit de climatisation

Publication

**EP 1640676 A1 20060329 (FR)**

Application

**EP 05017463 A 20050811**

Priority

FR 0410133 A 20040924

Abstract (en)

The device has an outer cylindrical wall (20) with channels (22) to vertically circulate refrigerant upwards at high pressure and temperature. An annular space (48) is defined between the wall (20) and a cylindrical wall of a refrigerant container (32) to vertically circulate the refrigerant downwards at low pressure and temperature. Heat is exchanged between the refrigerants. Connections for the refrigerant, and for connection to an evaporator and a compressor, are grouped respectively in an upper flange (26) and a lower flange (24). An independent claim is also included for a gas cooler for an air-conditioning circuit circulated by a refrigerant in gaseous phase.

IPC 8 full level

**F25B 40/00** (2006.01)

CPC (source: EP)

**F25B 40/00** (2013.01); **F25B 43/006** (2013.01); **F28D 7/026** (2013.01); **F28D 7/103** (2013.01); **F28F 1/105** (2013.01); **F28F 7/02** (2013.01); **F25B 9/008** (2013.01); **F25B 2309/061** (2013.01); **F25B 2339/044** (2013.01); **F25B 2400/051** (2013.01); **F25B 2500/18** (2013.01)

Citation (applicant)

- US 6523365 B2 20030225 - ZHANG CHAO A [US], et al
- US 6539746 B1 20030401 - HAUSSMANN ROLAND [DE]
- US 6189334 B1 20010220 - DIENHART BERND [DE], et al
- US 6751983 B1 20040622 - DIENHART BERND [DE], et al

Citation (search report)

- [A] US 2004031596 A1 20040219 - NISHIDA SHIN [JP], et al
- [DA] US 6751983 B1 20040622 - DIENHART BERND [DE], et al
- [A] US 6298687 B1 20011009 - DIENHART BERND [DE], et al
- [DA] US 6539746 B1 20030401 - HAUSSMANN ROLAND [DE]
- [A] EP 1306629 A1 20030502 - MATSUSHITA ELECTRIC IND CO LTD [JP]
- [A] PATENT ABSTRACTS OF JAPAN vol. 2003, no. 12 5 December 2003 (2003-12-05)

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DOCDB simple family (application)

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