

Title (en)  
(Mixed) refrigerant circuit and operating method for a (mixed) refrigerant circuit

Title (de)  
Kältemittel(gemisch)kreislauf und Verfahren zum Betreiben eines Kältemittel(gemisch)kreislaufes

Title (fr)  
Circuit de (mélange de) réfrigérant(s) et procédé de fonctionnement d'un tel circuit

Publication  
**EP 1457744 A3 20041027 (DE)**

Application  
**EP 04005170 A 20040304**

Priority  
DE 10310600 A 20030311

Abstract (en)  
[origin: EP1457744A2] The compressor (1) passes the refrigerant through an air cooled condenser (3), heat exchanger (5), expansion capillary (6) and evaporator (7) to provide low temperature cooling. A shut-off valve (9) is positioned in the condenser to capillary line (4) at least 600mm from the capillary.

IPC 1-7  
**F25B 1/00**; **F25B 41/04**

IPC 8 full level  
**F25B 41/04** (2006.01); **F25B 41/06** (2006.01)

CPC (source: EP US)  
**F25B 41/24** (2021.01 - EP US); **F25B 41/37** (2021.01 - EP US); **F25B 2500/01** (2013.01 - EP); **F25B 2500/26** (2013.01 - EP); **F25B 2600/2519** (2013.01 - EP)

Citation (search report)

- [XAY] US 4286438 A 19810901 - CLARKE CLARENCE C
- [XA] WO 9802697 A1 19980122 - ZANUSSI ELETTROMECC [IT], et al
- [XA] US 5630323 A 19970520 - NIIJIMA HIROSI [JP], et al
- [A] JP S5927161 A 19840213 - HITACHI LTD
- [A] DE 2853757 A1 19791108 - MCQUAY PERFEX INC
- [A] DE 2722792 A1 19780720 - MCQUAY PERFEX INC
- [X] PATENT ABSTRACTS OF JAPAN vol. 1998, no. 04 31 March 1998 (1998-03-31)
- [YA] PATENT ABSTRACTS OF JAPAN vol. 1999, no. 03 31 March 1999 (1999-03-31)

Cited by  
EP2437013A3; EP2211128A1; US10184696B2; WO2014180176A1; WO2007062920A1; US10260796B2; US10982886B2; WO2017028888A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
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