

Title (en)
SUPERCOOLING APPARATUS

Title (de)
UNTERKÜHLVORRICHTUNG

Title (fr)
APPAREIL DE SUPER-RÉFRIGÉRATION

Publication
EP 1679479 A4 20120328 (EN)

Application
EP 05748824 A 20050609

Priority
• JP 2005010611 W 20050609
• JP 2004174579 A 20040611

Abstract (en)
[origin: EP1679479A1] A subcooling unit (200) includes a refrigerant passage (205) connected to liquid side communication pipes (21, 22) of a refrigerating apparatus (10). When a subcooling compressor (221) is operated, subcooling refrigerant circulates in a subcooling refrigerant circuit (220) to perform a refrigeration cycle, thereby cooling refrigerant of the refrigerating apparatus (10) which flows in the refrigerant passage (205). A controller (240) of the subcooling unit (200) receives the detection value of an outside air temperature sensor (231) or a refrigerant temperature sensor (236). The controller (240) controls the operation of the subcooling compressor (221) with the use of only information obtainable within the subcooling unit (200).

IPC 8 full level
F25B 13/00 (2006.01); **F25B 1/00** (2006.01); **F25B 40/02** (2006.01)

CPC (source: EP KR US)
F25B 1/00 (2013.01 - KR); **F25B 13/00** (2013.01 - EP US); **F25B 40/00** (2013.01 - KR); **F25B 40/02** (2013.01 - EP KR US);
F25B 49/02 (2013.01 - KR); **F25B 2313/02331** (2013.01 - EP US); **F25B 2400/22** (2013.01 - EP US); **F25B 2700/2103** (2013.01 - EP US);
F25B 2700/2106 (2013.01 - EP US)

Citation (search report)
• [XDI] JP H10185333 A 19980714 - DAIKIN IND LTD
• [XI] JP H0828984 A 19960202 - TOSHIBA CORP
• See references of WO 2005121655A1

Cited by
EP2333445A4

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

DOCDB simple family (publication)
EP 1679479 A1 20060712; EP 1679479 A4 20120328; AU 2005252962 A1 20051222; AU 2005252962 B2 20080313;
CN 100375874 C 20080319; CN 1820168 A 20060816; KR 100738780 B1 20070712; KR 20060063971 A 20060612;
US 2008229769 A1 20080925; WO 2005121655 A1 20051222

DOCDB simple family (application)
EP 05748824 A 20050609; AU 2005252962 A 20050609; CN 200580000683 A 20050609; JP 2005010611 W 20050609;
KR 20067005400 A 20060317; US 57194005 A 20050609