

Title (en)
FREEZING DEVICE

Title (de)
GEFRIERVORRICHTUNG

Title (fr)
DISPOSITIF DE CONGÉLATION

Publication
EP 2175212 A4 20141008 (EN)

Application
EP 08764088 A 20080611

Priority
• JP 2008001493 W 20080611
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Abstract (en)
[origin: EP2175212A1] The present disclosure allows for easy settling of control of capability of an refrigeration apparatus for performing a supercritical refrigeration cycle. An air conditioner (10) includes: a refrigerant circuit (20) sequentially connecting a compressor (21), an outdoor heat exchanger (23), an outdoor expansion valve (24), and an indoor heat exchanger (27), and performing a supercritical refrigeration cycle in which a high pressure is a supercritical pressure or higher; and a controller (40) for controlling a plurality of objects of control including at least the compressor (21) and the outdoor expansion valve (24). The controller (40) concurrently controls the plurality of objects of control, thereby concurrently controlling a predetermined physical value as an index of an ability of the refrigeration apparatus, and the high pressure of the refrigeration cycle.

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Citation (search report)
• [X] US 2007068178 A1 20070329 - HONMA MASAYA [JP], et al
• [X] US 2005284164 A1 20051229 - OHTA HIROMI [JP]
• [I] US 2006086110 A1 20060427 - MANOLE DAN M [US]
• [A] US 2006277932 A1 20061214 - OTAKE MASAHISA [JP], et al
• See references of WO 2009004761A1

Cited by
EP3015798A1; EP3118547A1; EP3029330A1; EP2551612A3; EP2873934A4; EP3702696A4; EP3073348A1; EP3267127A4; US10451325B2; US11333449B2; US9933194B2; WO2014087168A1; WO2014031559A1; US10816245B2; US10775086B2; US11460230B2; WO2012036855A1; WO2017067858A1

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