

Title (en)
FREEZING APPARATUS, AND EXPANDER

Title (de)
GEFRIERGERÄT UND EXPANDER

Title (fr)
APPAREIL DE CONGÉLATION ET DÉTENDEUR

Publication
EP 2090746 A4 20160601 (EN)

Application
EP 07850281 A 20071207

Priority
• JP 2007073703 W 20071207
• JP 2006331664 A 20061208
• JP 2007316259 A 20071206

Abstract (en)
[origin: EP2090746A1] A refrigerating apparatus is obtained which can recover the energy of high pressure refrigerant in an expansion mechanism as power to maximum, and can change the suction amount of the refrigerant in the expansion mechanism. The expansion mechanism (50) includes two rotary mechanism sections (70, 80) having displacement volumes different from each other. The rotary mechanism sections are connected in series to each other. Two suction ports (55, 56) are formed in a cylinder of a rotary mechanism section having a smaller displacement volume. Inflow pipes (24, 27) connected to the suction ports (55, 56) include a pre-throttle valve (60) and an on-off valve (61), respectively. A bypass valve (66) is provided in a bypass pipe (65) bypassing the expansion mechanism (50). Control on the valves (60, 61, 66) achieves balance between the refrigerant circulation amount in the expansion mechanism (50) and the refrigeration circulation amount in a compression mechanism (40).

IPC 8 full level
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Citation (search report)
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• [X] EP 1724436 A1 20061122 - DAIKIN IND LTD [JP]
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