

Title (en)  
REFRIGERATION UNIT

Title (de)  
KÜHLEINHEIT

Title (fr)  
UNITÉ DE RÉFRIGÉRATION

Publication  
**EP 2402681 B1 20180321 (EN)**

Application  
**EP 09840728 A 20091130**

Priority  
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Abstract (en)  
[origin: EP2402681A1] In a refrigerant circuit (20), the variable capacity compressor (40a) sucks refrigerant through a first suction pipe (51), and a second fixed capacity compressor (40c) sucks refrigerant through a third suction pipe (53). Refrigeration oil of an oil separator (47a-47c) flows into the compressor (40a-40c) through an oil return pipe (54) and a main injection pipe (61) together with intermediate-pressure refrigerant. During a normal operation, a controller (200) adjusts the degree of opening of an injection motor-operated valve (64a-64c) so that the temperature of refrigerant discharged from the corresponding compressor reaches a predetermined target value. If the first suction pipe (51) has a pressure lower than that of the third suction pipe (53), the controller temporarily decreases the degree of opening of the first injection motor-operated valve (64a) as compared to that during the normal operation, and temporarily increases the degree of opening of the third injection motor-operated valve (64c) as compared to that during the normal operation. As a result, the flow rate of intermediate-pressure refrigerant and refrigeration oil flowing into the second fixed capacity compressor (40c) is increased.

IPC 8 full level  
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CPC (source: EP)  
**F25B 13/00** (2013.01); **F25B 31/004** (2013.01); **F25B 2313/005** (2013.01); **F25B 2313/0233** (2013.01); **F25B 2313/02743** (2013.01)

Cited by  
EP3252395A4; CN102645057A; EP3957931A4; EP3995761A1; WO2022097680A1; EP3995760A1; EP3995758A1

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