

Title (en)

TWO-STAGE COMPRESSION REFRIGERATION SYSTEM

Title (de)

ZWEISTUFIGE KOMPRESSIÖNSKÄLTEANLAGE

Title (fr)

SYSTÈME DE RÉFRIGÉRATION PAR COMPRESSION À DEUX ÉTAGES

Publication

EP 3136020 B1 20190417 (EN)

Application

EP 16185537 A 20160824

Priority

JP 2015167987 A 20150827

Abstract (en)

[origin: EP3136020A1] A two-stage compression refrigeration system 1 includes a two-stage compressor 2 that is provided with a low-stage compressor 21 and a high-stage compressor 22 in a closed housing 20 and whose interior is under an intermediate pressure, an oil separating device 3 that is provided on a discharge pipe 9A, an oil return pipe 13 that returns the oil separated by the oil separating device 3, into the closed housing 20 under the intermediate pressure, and a gas injection pipe 14 that injects an intermediate-pressure refrigerant gas from a gas-liquid separating device 6 provided on a refrigerant circuit 10, into the closed housing 20, and the oil return pipe 13 and the gas injection pipe 14 individually communicate with the closed housing 20, between the low-stage compressor 21 and high-stage compressor 22 of the two-stage compressor 2.

IPC 8 full level

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CPC (source: EP)

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F04C 29/04 (2013.01); **F25B 1/10** (2013.01); **F25B 31/02** (2013.01); **F25B 41/39** (2021.01); **F04C 18/0215** (2013.01); **F04C 18/356** (2013.01);
F25B 31/004 (2013.01); **F25B 2400/13** (2013.01); **F25B 2400/23** (2013.01)

Cited by

CN109404279A; CN113883600A; CN113669936A; CN111108333A; EP4198416A4; CN111963437A; CN112815584A; US11754321B2;
US11428226B2; US11415342B2; EP3578817A1; EP3604813A1; CN110792596A; US11428225B2; US11994127B2; US10948220B2;
CN112771323A; EP3859233A4

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