

Title (en)  
Vapor compression refrigerating system

Title (de)  
Dampf-Kompressionskältesystem

Title (fr)  
Système de réfrigération à compression de vapeur

Publication  
**EP 1795835 A3 20081008 (EN)**

Application  
**EP 06125847 A 20061211**

Priority  
JP 2005357701 A 20051212

Abstract (en)  
[origin: EP1795835A2] A vapor compression refrigerating system includes a compressor (1), a radiator (2) connected to the compressor via a first tube, a first pressure reducing mechanism (3) connected to the radiator (2) via a second tube, and a separator (4) connected to the first pressure reducing mechanism (3) via a third tube and the compressor (1) via a fourth tube (7). The separator (4) includes an oil separator which is configured to separate an oil from the refrigerant, and a liquid and gas separator formed integral with the oil separator. The liquid and gas separator is configured to separate a liquid portion and a gas portion from the refrigerant, and the separator is further configured to transmit the oil and the gas portion to the compressor via the fourth tube (7). The system also includes a second pressure reducing mechanism (5) connected to the separator via a fifth tube, and an evaporator (6) connected to the second pressure reducing mechanism via a sixth tube and operationally coupled to the compressor via a seventh tube. The second pressure reducing mechanism is configured to receive the liquid portion from the separator.

IPC 8 full level  
**F25B 9/00** (2006.01); **F25B 40/00** (2006.01); **F25B 43/00** (2006.01)

CPC (source: EP US)  
**F25B 9/008** (2013.01 - EP US); **F25B 40/00** (2013.01 - EP US); **F25B 41/39** (2021.01 - EP); **F25B 41/39** (2021.01 - US);  
**F25B 2309/061** (2013.01 - EP US); **F25B 2400/053** (2013.01 - EP US); **F25B 2400/13** (2013.01 - EP US); **F25B 2400/23** (2013.01 - EP US)

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US8966934B2; US9625181B2; WO2012176072A3

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**EP 06125847 A 20061211; JP 2005357701 A 20051212; US 60961706 A 20061212**