

Title (en)
REFRIGERATION METHOD AND APPARATUS

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EP 0208526 A3 19891004 (EN)

Application
EP 86305218 A 19860707

Priority
GB 8517445 A 19850710

Abstract (en)
[origin: EP0208526A2] In a mechanical refrigeration apparatus of the vapour compression kind, comprising a compressor 2, condenser 4, expansion valve 6, and evaporator 8, a sub-cooler 12 is employed to reduce the temperature of the condensed refrigerant to a value at which at least 90% by volume and preferably all of it remains in the liquid phase on passage through the expansion valve 6. The sub-cooler 12 is cooled by means of a supply of liquid nitrogen from vessel 14. Alternatively, liquid nitrogen is evaporated in a circulating heat exchange atmosphere in the sub-cooler 12. Increased heat load in chamber 10 may thus be met without there necessarily being any increase in the evaporating temperature and pressure.

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F25B 1/00 (2006.01); **F25B 25/00** (2006.01); **F25B 40/02** (2006.01)

CPC (source: EP)
F25B 25/00 (2013.01); **F25B 40/02** (2013.01)

Citation (search report)
• [A] DE 3025439 A1 19810527 - TYLER REFRIGERATION CORP [US]
• [A] US 4285205 A 19810825 - MARTIN LEONARD I, et al
• [A] DE 3322474 A1 19850117 - LINDE AG [DE]

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CN102393107A; EP1276215A3; EP0763848A3; EP0787957A3; GB2374666A; GB2374666B; NL1000899C2; US9605666B2; EP1276215A2; US6351950B1; WO9913277A1

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