

Title (en)

METHOD AND DEVICE FOR PRODUCING COLD

Title (de)

VERFAHREN UND VORRICHTUNG ZUR KÄLTEERZEUGUNG

Title (fr)

PROCEDE ET DISPOSITIF POUR PRODUIRE DU FROID

Publication

**EP 1078208 A1 20010228 (DE)**

Application

**EP 99924849 A 19990430**

Priority

- DE 19820961 A 19980512
- DE 19821308 A 19980513
- EP 9902932 W 19990430

Abstract (en)

[origin: US6463744B1] In a process for refrigeration in the 65 to 150 K temperature range, in which the refrigerant is compressed using an oil-lubricated compressor, then cooled to ambient temperature and then oil is removed from the refrigerant before the refrigerant is fed to a Joule Thomson heat exchanger, the refrigerant is additionally cooled after it has been cooled to ambient temperature and before it enters the Joule Thomson heat exchanger. In a device for refrigeration in the 65 to 150 K temperature range, which has an oil-lubricated compressor for compressing a refrigerant, an aftercooler connected downstream for cooling the refrigerant to ambient temperature, a device following on from this for removing oil from the refrigerant and a Joule Thomson countercurrent heat exchanger connected downstream of the device for removing the oil, an oil condenser is arranged between the aftercooler and the Joule Thomson countercurrent heat exchanger.

IPC 1-7

**F25B 9/02; F25B 43/02**

IPC 8 full level

**F25B 7/00** (2006.01); **F25B 9/00** (2006.01); **F25B 9/02** (2006.01); **F25B 40/02** (2006.01); **F25B 43/02** (2006.01); **F25B 31/00** (2006.01); **F25B 43/00** (2006.01)

CPC (source: EP US)

**F25B 7/00** (2013.01 - EP US); **F25B 9/02** (2013.01 - EP US); **F25B 40/02** (2013.01 - EP US); **F25B 43/02** (2013.01 - EP US); **F25B 9/006** (2013.01 - EP US); **F25B 31/004** (2013.01 - EP US); **F25B 43/003** (2013.01 - EP US)

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

**US 6463744 B1 20021015**; AT E216481 T1 20020515; DE 59901262 D1 20020523; EP 1078208 A1 20010228; EP 1078208 B1 20020417; JP 2002514734 A 20020521; PE 20000391 A1 20000524; WO 9958905 A1 19991118

DOCDB simple family (application)

**US 67494800 A 20001106**; AT 99924849 T 19990430; DE 59901262 T 19990430; EP 9902932 W 19990430; EP 99924849 A 19990430; JP 2000548667 A 19990430; PE 00037599 A 19990507