

Title (en)

High pressure separation of liquid lubricant to lubricate volumetric expansion machines

Title (de)

Hochdruckseitige Abtrennung von flüssigem Schmierstoff zur Schmierung volumetrisch arbeitender Expansionsmaschinen

Title (fr)

Séparation du côté haute pression de lubrifiant liquide pour la lubrification de machines d'expansion fonctionnant de manière volumétrique

Publication

EP 2514933 B1 20170315 (DE)

Application

EP 11003288 A 20110419

Priority

EP 11003288 A 20110419

Abstract (en)

[origin: EP2514933A1] The method involves supplying working medium i.e. fluorinated hydrocarbon, from a feed pump (50) to a lubricant separator (10), and separating portion of lubricant from the medium. The separated portion is supplied from the separator to an expansion machine (30). The medium is supplied from the separator to an evaporator (20) for evaporating the medium, and the evaporated medium is supplied to the machine. The medium is supplied from the machine to a condenser (60), and the medium is liquefied with the condenser, where the liquefied medium is supplied from the condenser to the pump. An independent claim is also included for a thermodynamic cyclic process device comprising an expansion machine.

IPC 8 full level

F01K 25/10 (2006.01); **F01C 21/04** (2006.01); **F04C 29/02** (2006.01); **F01C 1/02** (2006.01); **F01C 1/12** (2006.01); **F01C 1/16** (2006.01); **F01C 1/344** (2006.01)

CPC (source: EP US)

F01C 21/04 (2013.01 - EP US); **F01K 13/006** (2013.01 - US); **F01K 25/06** (2013.01 - US); **F01K 25/10** (2013.01 - EP US); **F01C 1/02** (2013.01 - EP US); **F01C 1/12** (2013.01 - EP US); **F01C 1/16** (2013.01 - EP US); **F01C 1/344** (2013.01 - EP US)

Cited by

EP2743464A1; FR3029561A1; EP3032048A1; US9500101B2

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DOCDB simple family (publication)

EP 2514933 A1 20121024; **EP 2514933 B1 20170315**; CN 103547772 A 20140129; CN 103547772 B 20160316; US 10024196 B2 20180717; US 2016290172 A1 20161006; WO 2012143104 A1 20121026

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EP 11003288 A 20110419; CN 201280019104 A 20120412; EP 2012001596 W 20120412; US 201214008058 A 20120412