

Title (en)
Lubrication of expansion machines

Title (de)
Schmierung von Expansionsmaschinen

Title (fr)
Lubrification de machines d'expansion

Publication
EP 2746543 B1 20160928 (DE)

Application
EP 12198869 A 20121221

Priority
EP 12198869 A 20121221

Abstract (en)
[origin: EP2746543A1] The device comprises an expansion engine (5) that is configured for conversion of enthalpy in a working fluid having a lubricant additive into mechanical energy. A multi-stage pressure increasing unit is configured for gradually pressurizing the working fluid. A diverting unit is configured for diverting a portion of the working fluid between two stages of the multi-stage pressure increasing unit. A delivering unit is configured for delivering the diverted portion of the working fluid to multiple bearing points (3) of the expansion engine. An independent claim is included for a method of lubricating an expansion engine in a thermodynamic cyclic process device.

IPC 8 full level
F01K 17/04 (2006.01); **F22B 1/16** (2006.01); **F22D 11/02** (2006.01)

CPC (source: EP US)
F01K 17/04 (2013.01 - EP US); **F01K 25/06** (2013.01 - US); **F01M 1/02** (2013.01 - US); **F01M 7/00** (2013.01 - US); **F22D 11/02** (2013.01 - EP US); **F01K 7/36** (2013.01 - US); **F01M 2001/023** (2013.01 - US); **F01M 2001/0238** (2013.01 - US); **F22B 1/167** (2013.01 - EP US)

Cited by
CN108138695A

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
EP 2746543 A1 20140625; **EP 2746543 B1 20160928**; CN 105102770 A 20151125; CN 105102770 B 20180130; US 10100682 B2 20181016; US 2016169055 A1 20160616; WO 2014095333 A2 20140626; WO 2014095333 A3 20141204

DOCDB simple family (application)
EP 12198869 A 20121221; CN 201380066562 A 20131203; EP 2013075310 W 20131203; US 201314653242 A 20131203