

Title (en)

METHOD FOR CONVERTING HEAT ENERGY INTO MECHANICAL ENERGY WITH A LOW-PRESSURE EXPANSION DEVICE

Title (de)

VERFAHREN ZUR UMWANDLUNG VON WÄRMEENERGIE IN MECHANISCHE ENERGIE MIT EINER NIEDERDRUCK-ENTSPANNUNGSVORRICHTUNG

Title (fr)

PROCEDE DE CONVERSION D'ENERGIE THERMIQUE EN ENERGIE MECANIQUE PAR UN DISPOSITIF DE DETENTE BASSE TENSION

Publication

EP 1702140 B1 20070822 (DE)

Application

EP 04816348 A 20041222

Priority

- EP 2004053654 W 20041222
- DE 10360364 A 20031222
- DE 10360380 A 20031222
- DE 10360379 A 20031222
- DE 10361203 A 20031224
- DE 10361223 A 20031224

Abstract (en)

[origin: WO2005061858A1] The invention relates to a method for converting heat energy, which is produced in an evaporator (6), into mechanical energy by expanding a vaporous working medium which is evaporated in the evaporator (6) which is then expanded in an expansion device (2). According to the invention, expansion occurs in a low-pressure expansion device which is embodied in the form of a roller piston blower (2) wherein the working medium is expanded, thereby converting heat energy into mechanical energy.

IPC 8 full level

F01K 25/06 (2006.01); **F01K 25/08** (2006.01); **F22B 3/00** (2006.01); **F25B 15/00** (2006.01); **F25B 30/04** (2006.01)

CPC (source: EP US)

F01K 25/06 (2013.01 - EP US); **F01K 25/065** (2013.01 - EP US)

Cited by

DE102019135820A1; DE102008036917A1; DE102008013737A1; DE202021100874U1; EP4047180A1; EP3842621A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR LV MK YU

DOCDB simple family (publication)

WO 2005061858 A1 20050707; AT E371101 T1 20070915; DE 502004004776 C5 20200116; DE 502004004776 D1 20071004; EP 1702139 A1 20060920; EP 1702140 A1 20060920; EP 1702140 B1 20070822; EP 1706598 A1 20061004; EP 1706598 B1 20131016; EP 1706599 A1 20061004; EP 1706599 B1 20170215; EP 1706681 A1 20061004; ES 2293384 T3 20080316; ES 2624638 T3 20170717; US 2008134680 A1 20080612; US 2008289336 A1 20081127; US 7726128 B2 20100601; US 8132413 B2 20120313; WO 2005061857 A1 20050707; WO 2005061973 A1 20050707; WO 2005066465 A1 20050721; WO 2005066466 A1 20050721

DOCDB simple family (application)

EP 2004053654 W 20041222; AT 04816348 T 20041222; DE 502004004776 T 20041222; EP 04804983 A 20041222; EP 04804984 A 20041222; EP 04804985 A 20041222; EP 04804988 A 20041222; EP 04816348 A 20041222; EP 2004053649 W 20041222; EP 2004053650 W 20041222; EP 2004053651 W 20041222; EP 2004053655 W 20041222; ES 04804988 T 20041222; ES 04816348 T 20041222; US 58392507 A 20070810; US 58393604 A 20041222