

Title (en)
PISTON MACHINE

Title (de)
KOLBENMASCHINE

Title (fr)
MACHINE A PISTON

Publication
EP 0644981 B1 19970827 (DE)

Application
EP 93912894 A 19930604

Priority
• DE 4218847 A 19920609
• EP 9301422 W 19930604

Abstract (en)
[origin: US5681156A] PCT No. PCT/EP93/01422 Sec. 371 Date Jan. 12, 1995 Sec. 102(e) Date Jan. 12, 1995 PCT Filed Jun. 4, 1993 PCT Pub. No. WO93/25801 PCT Pub. Date Dec. 23, 1993A piston machine usable as an expansion engine, suction pump or compressor for a compressible medium has a housing containing a working space with two parallel walls and an interconnecting peripheral wall perpendicular to the parallel walls, the peripheral wall having a first chamber surface. A piston has a second chamber surface cooperating with the first chamber surface to form a chamber of variable volume. Two identical crankshafts rotatably mounted in the housing have crank pins rotatable in and supporting the piston, the crankshafts being coupled together for angular synchronous rotation. A first sealing element is mounted on the piston and a second sealing element is mounted on the peripheral wall. Each of the first and second chamber surfaces is formed as a sliding surface to slidingly engage the sealing element of the other of said chamber surfaces during piston rotation. The housing provides a high-pressure gas passage having an opening communicating with the chamber and a low-pressure gas passage communicating with a working space outside of the chamber.

IPC 1-7
F01C 1/06

IPC 8 full level
F01C 1/06 (2006.01)

CPC (source: EP US)
F01C 1/06 (2013.01 - EP US)

Cited by
DE10131819C1; DE102008025186B4; DE102008025185A1; DE102008025186A1

Designated contracting state (EPC)
AT DE ES FR GB IT NL SE

DOCDB simple family (publication)
US 5681156 A 19971028; AT E157426 T1 19970915; AU 4323193 A 19940104; DE 4218847 A1 19931216; DE 59307216 D1 19971002; EP 0644981 A1 19950329; EP 0644981 B1 19970827; ES 2109503 T3 19980116; WO 9325801 A1 19931223

DOCDB simple family (application)
US 35129195 A 19950112; AT 93912894 T 19930604; AU 4323193 A 19930604; DE 4218847 A 19920609; DE 59307216 T 19930604; EP 9301422 W 19930604; EP 93912894 A 19930604; ES 93912894 T 19930604