

Title (en)

INLET SHUT-OFF VALVE FOR ROTARY PISTON PUMPS

Publication

EP 0163228 A3 19860305 (EN)

Application

EP 85106167 A 19850520

Priority

US 61260084 A 19840521

Abstract (en)

[origin: EP0163228A2] A shaft lip sealed is provided as an inlet shut-off valve seal in the working fluid inlet line of a rotary piston pump between the first pumping chamber of the vacuum pump and the inlet to the operating chamber. A piston valve is provided, having an axially inclined radial face, for engaging this seal and cutting off flow therebetween even under low pressures. This piston valve is actuated into sealing engagement with the shaft lip seal when operation of the vacuum pump ceases and a pressure relief vent is connected to the first pumping chamber.

IPC 1-7

F04C 29/02; **F04C 29/08**

IPC 8 full level

F04C 27/02 (2006.01); **F04C 28/28** (2006.01); **F04C 29/02** (2006.01)

CPC (source: EP)

F04C 28/28 (2013.01); **F04C 29/021** (2013.01)

Citation (search report)

- DD 131487 A1 19780628 - KAUNERT JUERGEN, et al
- CH 476921 A 19690815 - EDWARDS HIGH VACUUM INT LTD [GB]
- DD 205219 A1 19831221 - PUMPEN U VERDICHTER WISSENSCHA [DD]
- GB 1195361 A 19700617 - N G N LTD
- US 3406897 A 19681022 - KURT DIELS KARL GUSTAV
- GB 1481748 A 19770803 - PFEIFFER VAKUUMTECHNIK
- GB 1323780 A 19730718 - INGERSOLL RAND CO

Cited by

US5871338A; EP0519880A1; WO9504223A1

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

EP 0163228 A2 19851204; **EP 0163228 A3 19860305**; JP S60249691 A 19851210

DOCDB simple family (application)

EP 85106167 A 19850520; JP 9766685 A 19850508