

Title (en)  
ANTISUCKBACK DEVICE FOR ROTARY PISTON PUMPS

Publication  
**EP 0162434 A3 19860305 (EN)**

Application  
**EP 85106168 A 19850520**

Priority  
US 61263184 A 19840521

Abstract (en)  
[origin: EP0162434A2] A rotary piston vacuum pump is provided with an oil pump in the lubricating oil circuit, a pressure relief vent connected to the pumping chamber from a higher pressure source, and biased valve connected between the oil pump and the oil circuit as well as between the pressure relief vent and the first pumping chamber for controlling the flow of oil and pressure, respectively. The oil pump pressurizes the oil in the oil lubrication circuit as a function of vacuum pump operation. The valve is responsive to the oil pressure created by the oil pump. The valve is actuated to maintain the free flow of oil from the oil pump to the oil circuit when the pump is operating. When the pump is shut-off, the bias of the valve shuts off the flow of oil through the oil circuit and opens the connection between the pressure relief vent and the first pumping chamber to increase the pressure in the latter such that lubricating oil is not drawn into that pumping chamber. This increased pressure from the pressure relief vent actuates an inlet shut-off valve which isolates the first pressure chamber from the operating chamber.

IPC 1-7  
**F04C 29/02**; **F04C 29/08**

IPC 8 full level  
**F04C 25/02** (2006.01); **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)

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- DD 131487 A1 19780628 - KAUNERT JUERGEN, et al
- DE 1428236 A1 19681128 - ALSACIENNE D ELECTRONIQUE ET D
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Cited by  
US5341658A; EP0355260A3; GB2269424A

Designated contracting state (EPC)  
DE FR GB IT

DOCDB simple family (publication)  
**EP 0162434 A2 19851127**; **EP 0162434 A3 19860305**; JP S60249690 A 19851210

DOCDB simple family (application)  
**EP 85106168 A 19850520**; JP 9766585 A 19850508