

Title (en)  
EXTERNAL AXIS ROTARY PISTON MACHINE

Publication  
**EP 0137421 B1 19880608 (DE)**

Application  
**EP 84111533 A 19840927**

Priority  
CH 551683 A 19831010

Abstract (en)  
[origin: US4626182A] An external shaft rotary piston machine wherein pistons of a piston rotor run in engagement with a cavity of a circular cylindrical sealing rotor during a particular relative rotational position of the rotors, the cavity being substantially larger than necessary for passage of the pistons in order to avoid flow losses due to seal wedging flow and compression. In order to avoid overflow from the high pressure side to the low pressure side of the machine through the sealing rotor while the pistons move in the sealing rotor through the space defined by the cavity, a sealing effect is created by a leading edge and a trailing edge portion of the opening of the cavity of the sealing rotor moving along a leading and a trailing side surface of the pistons. This is effected kinematically due to the fact that the trailing edge of the cavity opening is displaced radially inwardly and that an edge portion extends from the trailing edge convexly relative to the peripheral surface of the sealing rotor.

IPC 1-7  
**F01C 1/20**

IPC 8 full level  
**F01C 1/00** (2006.01); **F01C 1/20** (2006.01)

CPC (source: EP US)  
**F01C 1/20** (2013.01 - EP US)

Cited by  
DE102007009291A1; US9664047B2; WO2014031805A3; US8956134B2; US9664048B2; US10138730B2; US11111788B2

Designated contracting state (EPC)  
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