

Title (en)

Wear-resisting means for scroll-type fluid-displacement apparatuses.

Title (de)

Verschleissfeste Mittel für eine Fluidumverdrängungsanlage mit Exzenterspiralelementen.

Title (fr)

Moyens anti-corrosion pour appareil de déplacement de fluide à volutes imbriquées.

Publication

**EP 0075053 A1 19830330 (EN)**

Application

**EP 81304364 A 19810922**

Priority

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Abstract (en)

A scroll type fluid displacement apparatus having a pair of scroll members (28, 30) each comprising an end plate (281, 301) and a spiral wrap (282, 302) extending from one side of the end plate. The spiral wraps interfit at an angular and radial offset to make a plurality of line contacts to define at least one pair of sealed-off fluid pockets. At least one of the scroll members (28) is provided with an anti-wear plate (40) at its end surface facing the other scroll member. The anti-wear plate is an insolute plate that covers those areas of the end surface of the end plate where the spiral wrap of the other scroll member makes contact during the orbital motion of the orbiting scroll member. An elastic plate can also be used between the anti-wear plate and the end surface of the end plate to give axial preload to the end surface of the spiral wrap of the other scroll member. The anti-wear plate prevents excessive wear while ensuring axial sealing. Therefore, the axial sealing of the fluid pockets is secured and wear of the scroll member is minimized.

IPC 1-7

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Citation (search report)

- US 3986799 A 19761019 - MCCULLOUGH JOHN E
- US 2519588 A 19500822 - MCCULLOCH ROBERT P
- FR 2370185 A1 19780602 - NIPPON PISTON RING CO LTD [JP]
- US 3888746 A 19750610 - UY JAMES C, et al
- US 3552895 A 19710105 - BAYLEY EUGENE S
- FR 2363010 A1 19780324 - BOSCH GMBH ROBERT [DE]
- EP 0012615 A1 19800625 - SANKYO ELECTRIC CO [JP]

Cited by

DE3442619A1; FR2574869A1; JP2023143657A; US6068458A; EP0855510A3; JPH0968175A; US5775888A; WO0006906A1; EP0122722B1

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