

Title (en)

Improvements in scroll type fluid compressor units.

Title (de)

Verbesserungen an Fluidumkompressoren mit ineinandergreifenden Spiralvorsprüngen.

Title (fr)

Améliorations à des compresseurs à fluide du type à volutes imbriquées.

Publication

EP 0012614 A1 19800625 (EN)

Application

EP 79302899 A 19791214

Priority

JP 15558978 A 19781215

Abstract (en)

A scroll type fluid compressor unit having an orbiting scroll member and a fixed scroll member which form at least one sealed off fluid pocket therebetween for fluid compression. Each spiral element (232 [242]) of each scroll member (23 [24]) is provided with a sealing element which is loosely fitted in a groove (35) formed in an axial end surface of the spiral element. During the operation, the compressed pressure fluid flows into the groove to urge the sealing element towards the end plate of the opposing scroll member and to the side wall of the groove, so that an axial sealing between the spiral element and the opposing end plate is obtained. The groove may be constituted by an upper portion having a relatively wide opening and a lower portion having a relatively narrow opening, and the sealing element is loosely fitted into the upper portion of the groove so that the hollow portion in which the compressed pressure fluid is introduced is readily formed.

IPC 1-7

F04C 27/00

IPC 8 full level

F04C 2/02 (2006.01); **F04C 18/02** (2006.01); **F04C 27/00** (2006.01)

CPC (source: EP)

F04C 27/005 (2013.01)

Citation (search report)

- US 4106780 A 19780815 - BLACK ARTHUR L
- US 3994636 A 19761130 - MCCULLOUGH JOHN E, et al

Cited by

CN110469505A; US4561832A; EP0069531A3; CN104389786A; CN110439820A; EP0743454A3; US5702241A; US4892469A; DE3638368A1; GB2183735A; US4732550A; GB2183735B; EP0106287A1; US9938975B2; WO8203429A1; EP0012616B1; EP2691652B1

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