

Title (en)

Scroll type fluid displacement apparatus.

Title (de)

Fluidumverdrängungsanlage mit Exzenterspiralelementen.

Title (fr)

Appareil à déplacement de fluide à volutes imbriquées.

Publication

EP 0049495 A1 19820414 (EN)

Application

EP 81107856 A 19811002

Priority

JP 13828980 A 19801003

Abstract (en)

A scroll type fluid displacement apparatus including a housing, a pair of scroll members (13, 14) each comprising an end plate and a spiral wrap means (132, 142) projecting from one surface of the end plate. Both wrap means (132, 142) are interfitted to make a plurality of line contacts between them, and a driving mechanism including a drive shaft is connected to one of the scroll members (14) to effect orbital motion thereof relative to the other (fixed) scroll member (13) while rotation of the orbiting scroll is prevented. The center portions of the wrap means (132, 142) are made thicker than the remaining portions thereof, the center portions extending substantially from the inner ends of the wrap means (132, 142) outwardly at least throughout the portions thereof which contact one another when the two innermost fluid pockets are merged into a single fluid pocket to form the high pressure space near the center of the scroll members (13, 14). This construction insures sealing of the high pressure space from adjacent fluid pockets, keeping volumetric efficiency and horsepower requirement of the unit to a certain level under a limited accuracy of machining the spiral elements (132, 142).

IPC 1-7

F01C 1/02

IPC 8 full level

F04C 18/02 (2006.01); **F01C 1/02** (2006.01)

CPC (source: EP)

F01C 1/0215 (2013.01); **F01C 1/0246** (2013.01)

Citation (search report)

- US 3874827 A 19750401 - YOUNG NIELS O
- GB 1165435 A 19691001 - VULLIEZ PAUL [FR]

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DOCDB simple family (application)

EP 81107856 A 19811002; AU 7576181 A 19810929; CA 387317 A 19811005; DE 3169565 T 19811002; JP 13828980 A 19801003; MY 8700531 A 19871230; SG 26687 A 19870313