

Title (en)

Scroll type fluid displacement apparatus.

Title (de)

Fluidumverdrängermaschine mit Exzenterspiralelementen.

Title (fr)

Appareil à déplacement de fluide à volutes imbriquées.

Publication

**EP 0105981 A1 19840425 (EN)**

Application

**EP 82305402 A 19821011**

Priority

EP 82305402 A 19821011

Abstract (en)

A scroll type fluid displacement apparatus including a housing (12) with a fluid inlet port and fluid outlet port is disclosed. A fixed scroll (22) is joined with the housing and has a first circular end plate (221) from which a first wrap extends. An orbiting scroll (23) has a second circular end plate (231) from which a second wrap extends. The first and second 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. A driving mechanism, which includes a drive shaft (13), is operatively connected to the orbiting scroll to effect the orbital motion of the orbiting scroll at radius Ror, while the rotation of the orbiting scroll is prevented by a rotation preventing/thrust bearing device (24), whereby the fluid in the fluid pockets moves inwardly or outwardly and changes in volume. The center of the first circular end plate is aligned with the center line of the housing and the center of the first wrap is radially offset from the center of the first circular end plate by the distance 1/2 Ror. The center of the second wrap is radially offset from the center of the second circular end plate by the distance 1/2 Ror. The drive shaft has a center line, which is aligned with the center line of the housing, and also has a crank pin, the center line of which is aligned with the center of the second circular end plate.

IPC 1-7

**F01C 1/02**

IPC 8 full level

**F01C 1/02** (2006.01)

CPC (source: EP)

**F01C 1/0215** (2013.01)

Citation (search report)

- [Y] EP 0010402 A1 19800430 - SANKYO ELECTRIC CO [JP]
- [Y] EP 0009355 A1 19800402 - SANKYO ELECTRIC CO [JP]
- [Y] EP 0039622 A1 19811111 - SANDEN CORP [JP]
- [Y] DE 3013785 A1 19810312 - HITACHI LTD

Cited by

JP2013181506A

Designated contracting state (EPC)

DE FR GB IT SE

DOCDB simple family (publication)

**EP 0105981 A1 19840425**

DOCDB simple family (application)

**EP 82305402 A 19821011**