

Title (en)

A SCROLL TYPE COMPRESSOR HAVING AN IMPROVED FLUID DISCHARGE MECHANISM

Publication

**EP 0069531 B1 19860226 (EN)**

Application

**EP 82303420 A 19820629**

Priority

JP 10171181 A 19810629

Abstract (en)

[origin: EP0069531A2] A scroll type compressor is disclosed having a housing with a fluid inlet port and a fluid outlet port. A fixed scroll is fixedly disposed within the housing and has a first end plate from which a first wrap extends. An orbiting scroll has a second end plate 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 fluid pockets and a central fluid pocket. These fluid pockets shift inwardly with consequent reduction of the volume thereof upon the orbital motion of the orbiting scroll. The inner end portion of each wrap has a bulbous shaped enlarged portion. The enlarged portion of the fixed scroll has a valve chamber which is connected to a discharge chamber in the housing. A discharge hole is formed through the inner side wall of the enlarged portion of the fixed scroll at a position near the center of the generating circle of the orbiting scroll to connect the valve chamber and the central fluid pocket. A valve member is disposed within the valve chamber to control the opening and closing of the discharge hole. Accordingly there-expansion volume of the compressor is reduced without raising the pressure loss of the fluid which flows from the central pocket to the discharge chamber through the discharge hole.

IPC 1-7

**F04C 18/02**

IPC 8 full level

**F04C 18/02** (2006.01); **F04C 29/12** (2006.01)

CPC (source: EP)

**F04C 18/0215** (2013.01); **F04C 29/128** (2013.01); **F04C 2250/102** (2013.01); **F05B 2250/502** (2013.01)

Cited by

US5174736A; US5249943A; EP0295664A3; US4940342A; EP1291563A3; DE10143433B4; EP0834655A1; EP0122066A1; DE102005013085B3; US5224848A; DE10103775A1; DE10103775B4; US4609334A; US6899126B2; US7600531B2; FR2820175A1; US6648617B2; EP0105684B1; WO03058101A1; WO9717543A1; WO9717545A1

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