

Title (en)

AN EXTERNAL GEAR PUMP OR GEAR MOTOR UNIT OF THE ASYMMETRIC RADIAL FLOATING TYPE

Publication

**EP 0216999 A3 19880720 (EN)**

Application

**EP 86108080 A 19860613**

Priority

CN 85107186 A 19850929

Abstract (en)

[origin: EP0216999A2] On the basis of asymmetry theory the low-pressure zone is enlarged and the high-pressure zone is reduced; the performance of said gear pump or gear motor is optimized by means of an asymmetric axial and radial floating compensation device (5); the realization of axial and radial floating compensation provides higher volumetric efficiency; by adopting the integral structure higher mechanical efficiency is obtained and the noise is reduced; the stable radial floating device makes the high-pressure radial sealing practicable. The high-pressure zone is reduced, the radial force is reduced and the lifetime of said gear pump or gear motor is prolonged. With the invention, the gear type hydraulic machinery can be pressurized up to 321 kg cm<sup>2</sup> level.

IPC 1-7

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IPC 8 full level

**F04C 2/18** (2006.01); **F04C 15/00** (2006.01)

CPC (source: EP)

**F04C 15/0019** (2013.01)

Citation (search report)

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- [Y] GB 1159315 A 19690723 - ECKERLE OTTO [DE]
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**EP 0216999 A2 19870408**; **EP 0216999 A3 19880720**; CN 85107186 A 19860716; CN 85107186 B 19881116; JP S6275086 A 19870406

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**EP 86108080 A 19860613**; CN 85107186 A 19850929; JP 16655686 A 19860715