

Title (en)

An external gear pump or gear motor unit of the asymmetric radial floating type.

Title (de)

Aussenzahnradpumpe oder -motor asymmetrischer radialschwebender Art.

Title (fr)

Pompe ou moteur à engrenement extérieur du type asymétrique flottant radialement.

Publication

EP 0216999 A2 19870408 (EN)

Application

EP 86108080 A 19860613

Priority

CN 85107186 A 19850929

Abstract (en)

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⁻² level.

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