

Title (en)

Pressure gradient controlled gear machine

Title (de)

Zahnradmaschine mit kontrollierbar ausgeglichenem Druckfeld

Title (fr)

Machine à engrenages à gradient de pression contrôlé

Publication

**EP 0802326 B1 20010725 (DE)**

Application

**EP 96105855 A 19960415**

Priority

EP 96105855 A 19960415

Abstract (en)

[origin: EP0802326A1] The machine has externally toothed meshing gears in a housing with two connection sections at different pressure levels. The pressure in the section (25) with the higher level is returned to the section (23) with the lower level via a circumferential section of the gears (11, 13). This causes the gears to be pressed against each other by hydraulic forces. The connection sections are separated by a dual-flank seal. The high pressure acting on the gear circumferences generates hydraulic radial forces, which move the gears against the inner housing surface, so that two, pref. three teeth of each gear engage sealing on that wall.

IPC 1-7

**F04C 15/00**

IPC 8 full level

**F04C 15/00** (2006.01)

CPC (source: EP US)

**F04C 15/0042** (2013.01 - EP US)

Citation (examination)

EP 0692633 A1 19960117 - CASAPPA SPA [IT]

Designated contracting state (EPC)

DE ES FR GB IT

DOCDB simple family (publication)

**EP 0802326 A1 19971022; EP 0802326 B1 20010725**; DE 19713907 A1 19971106; DE 59607362 D1 20010830; ES 2160737 T3 20011116; US 5730589 A 19980324

DOCDB simple family (application)

**EP 96105855 A 19960415**; DE 19713907 A 19970404; DE 59607362 T 19960415; ES 96105855 T 19960415; US 67352996 A 19960701