

Title (en)  
INTERNAL GEAR MACHINE

Publication  
**EP 0328745 B1 19920506 (DE)**

Application  
**EP 88118905 A 19881112**

Priority  
DE 3805186 A 19880219

Abstract (en)  
[origin: JPH01267378A] PURPOSE: To improve performance efficiency by rotatably disposing a pinion, which meshes with a portion of an internally toothed annular gear, in the annular gear rotatably disposed in a housing, and forming a plurality of openings each in a predetermined position between each pair of teeth of the annular gear to communicate the internal and the external of the annular gear. CONSTITUTION: An externally toothed pinion 2 is rotatably disposed on the inner side of an internally toothed 11 annular gear 1 rotatably disposed in a housing and meshes with a portion of the gear 1. A filling member 3 is disposed in a space between the pinion 2 and the remaining portion of the annular gear 1, whereby a pressurization chamber 4 of a pump is separated from a suction chamber 5. Further, a plurality openings 8 arranged in two transverse lines are formed in each gap between a pair of teeth 11 of the annular gear 1, and each opening 8 is formed in a non-bearing side 14 of the tooth 11 which delimits one side of the gap. Further, each opening 8 is formed to such an extent that a communication state is generated between the root and the tip of each tooth 11 of the annular gear 1.

IPC 1-7  
**F04C 2/10**

IPC 8 full level  
**F04C 2/08** (2006.01); **F04C 2/10** (2006.01); **F16H 1/10** (2006.01)

CPC (source: EP US)  
**F04C 2/084** (2013.01 - EP US); **F04C 2/101** (2013.01 - EP US)

Cited by  
DE4104397A1; GB2242233A; FR2665221A1; GB2242233B; WO9428311A1

Designated contracting state (EPC)  
DE FR GB IT

DOCDB simple family (publication)  
**EP 0328745 A2 19890823**; **EP 0328745 A3 19900307**; **EP 0328745 B1 19920506**; DE 3805186 A1 19890831; DE 3870853 D1 19920611; JP H01267378 A 19891025; JP H0650113 B2 19940629; US 4934913 A 19900619

DOCDB simple family (application)  
**EP 88118905 A 19881112**; DE 3805186 A 19880219; DE 3870853 T 19881112; JP 4015289 A 19890220; US 27248788 A 19881116