

Title (en)  
INTERNAL GEAR PUMP THAT DOES NOT CONTAIN ANY FILLER ELEMENTS

Title (de)  
FÜLLSTÜCKLOSE INNENZAHNRADPUMPE

Title (fr)  
POMPE A ENGRENAGES INTERIEURS SANS PIECES INTERCALAIRES

Publication  
**EP 1364126 A1 20031126 (DE)**

Application  
**EP 02714072 A 20020228**

Priority  
• DE 0200709 W 20020228  
• DE 10109769 A 20010301

Abstract (en)  
[origin: WO02070898A1] An internal gear pump that does not contain any filler elements comprises a housing (1) and a bearing ring (5), which is accommodated inside a recess (13) of the housing in a manner that permits it to transversally move in relation to its axis but not to rotate. The internal gear pump also comprises an internal-gear ring gear (3), which is mounted inside the bearing ring in a manner that permits it to revolve, and a pinion (2), which is mounted inside the housing in a manner that permits it to rotate and which meshes with said ring gear. The inner peripheral surface of the housing recess (13) coaxially extends in relation to the pinion (2), and the bearing ring, which is eccentrically arranged with regard to the pinion axis (15), can pivot in relation to the housing recess about a parallel pivotal axis (22, 23) that is parallel to the axis thereof. The bearing ring can pivot without the tight contact between the tooth tips of the pinion (2) and ring gear (3) being lost. The inner peripheral surface of the bearing ring (5) that forms the bearing surface for the ring gear (3) coaxially extends in relation to its outer peripheral surface (20), and the pivotal path of the bearing ring is delimited to a pre-designated measure by a pin (25), which passes therethrough or which is arranged in the sickle-shaped gap (21), or by a projecting step located inside this gap.

IPC 1-7  
**F04C 2/10**; **F04C 15/00**

IPC 8 full level  
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See references of WO 02070898A1

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