

Title (en)  
INTERNAL GEAR PUMP FOR A BRAKING SYSTEM

Title (de)  
INNENZAHNRADPUMPE FÜR EINE BREMSANLAGE

Title (fr)  
POMPE À ENGRENAGE INTERNE POUR SYSTÈME DE FREINAGE

Publication  
**EP 2205871 A1 20100714 (DE)**

Application  
**EP 08804523 A 20080922**

Priority

- EP 2008062596 W 20080922
- DE 102007050820 A 20071024

Abstract (en)  
[origin: WO2009053188A1] The invention relates to an internal gear pump (10) for a braking system, in the pump housing (11) of which an inner toothed hollow wheel (12) and a gearwheel (13) engaging in the toothing of the hollow wheel (12) are mounted to rotate about parallel axes, wherein the toothing thereof defines a tapering roughly crescent-shaped pump chamber, in which a filling piece (14) is arranged supported along the length thereof, the circumferential surfaces of which closely correspond to the head diameter of the hollow inner toothing or the gearwheel toothing and contact in a sealing manner with several tooth crowns covered thereby, wherein a radial supporting force acts over a longitudinal range of the filling piece (14) for improved sealing of a circumferential surface of the filling piece (14) against the tooth crowns supporting the circumferential surface. According to the invention, a loose fit is provided between the circumferential surfaces of the filling piece (14) and the opposing tooth crowns of the hollow wheel (12) and gearwheel (13) and the play acting on the filling piece (14) is partly eliminated by support forces acting in opposing radial directions which act on the filling piece (14) at a distance from each other.

IPC 8 full level  
**F04C 2/10** (2006.01); **F04C 15/00** (2006.01)

CPC (source: EP US)  
**F04C 2/101** (2013.01 - EP US); **F04C 15/0019** (2013.01 - EP US); **F04C 14/04** (2013.01 - EP US)

Citation (search report)  
See references of WO 2009053188A1

Citation (examination)

- JP S50140902 A 19751112
- US 2482713 A 19490920 - WALTER JONES

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL BA MK RS

DOCDB simple family (publication)  
**DE 102007050820 A1 20090430**; CN 101835986 A 20100915; CN 101835986 B 20120822; EP 2205871 A1 20100714; JP 2011501034 A 20110106; US 2010233005 A1 20100916; US 8579619 B2 20131112; WO 2009053188 A1 20090430

DOCDB simple family (application)  
**DE 102007050820 A 20071024**; CN 200880112809 A 20080922; EP 08804523 A 20080922; EP 2008062596 W 20080922; JP 2010530379 A 20080922; US 73960908 A 20080922