Title (en)
  Pressure regulation for controlled outer gearwheel oil pump

Title (de)
  Druckregelung für Aussenzahnrad-Regelölpumpen

Title (fr)
  Réglage de la pression pour pompes à huile régulée à denture extérieure

Publication
  EP 1911974 A1 20080416 (DE)

Application
  EP 07117939 A 20071005

Priority
  • DE 102006048089 A 20061011
  • DE 102006051575 A 20061102

Abstract (en)
  The regulator (17) has a component for filtering and cooling of hydraulic fluid, where the component is loaded with discharge pressure of a regulated oil pump. An adjusting device adjusts flow rate of the regulated oil pump. The adjusting device is loaded with an oil pressure, and a regulated pressure of the regulator regulates the oil pressure by a spring. The regulator produces an increased regulated pressure either from the oil pressure or from the discharge pressure fed over a connection (21), or from the discharge pressure of the regulated oil pump.

Abstract (de)
  Eine Außenzahnrad-Regelölpumpe für die Schmierölversorgung eines einen Ölfilter aufweisenden Verbrennungsmotors weist einen Regler (17,36) auf, der den hohen Förderdruck vor dem Ölfilter (14) für die Regelung des nach dem Ölfilter um dessen Druckverlust geringeren Öldruckes nutzt.

IPC 8 full level
  F04C 2/18 (2006.01); **F01M 1/16** (2006.01); **F04C 14/18** (2006.01)

CPC (source: EP)
  F01M 1/16 (2013.01); **F04C 2/18** (2013.01); **F04C 14/185** (2013.01); F01M 2001/0238 (2013.01); F01M 2001/0246 (2013.01); F04C 2270/50 (2013.01)

Citation (search report)
  • [PX] DE 202006015508 U1 20061207 - JOMA HYDROMECHANIC GMBH [DE]
  • [X] DE 10324092 A1 20041216 - VOIGT DIETER [DE]
  • [DX] DE 10237801 A1 20030731 - VOIGT DIETER [DE]
  • [A] DE 102004049029 A1 20060420 - AUDI AG [DE]
  • [A] DE 4224973 A1 19940203 - GLYCO METALL WERKE [DE]
  • [DA] WO 2005057013 A1 20050623 - VOIGT DIETER [DE]

Cited by
  DE102012022265A1; DE102011011791A1; DE102011011791B4; DE102013226744A1

Designated contracting state (EPC)
  FR GB IT

Designated extension state (EPC)
  AL BA HR MK RS

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