

Title (en)
VARIABLE CAPACITY LUBRICANT VANE PUMP

Title (de)
SCHMIERMITTEL-SCHAUFELPUMPE MIT VERSTELLBARER KAPAZITÄT

Title (fr)
POMPE À PAILLETES À LUBRIFIANT À CAPACITÉ VARIABLE

Publication
EP 2253847 A1 20101124 (EN)

Application
EP 09160524 A 20090518

Priority
EP 09160524 A 20090518

Abstract (en)
A variable capacity lubricant vane pump (10;10') for lubrication of an internal combustion engine (12) is provided with radially slidable vanes (24) arranged in vane slits (22) of a rotor ring (20), the vanes (24) defining pump chambers (30) therebetween, a capacity control ring (26) surrounding the vanes (24) and being pivotable around a pivot axis (28) thereby varying the volume of the pump chambers (30), a first and a second hydraulic control chamber (36,38), both control chambers being in part defined by the control ring (26) and thereby pivoting the control ring (26), and a preload spring (34) preloading the control ring (26) in one direction, wherein the first control chamber (36) and the second control chamber (38) are arranged on different sides with respect to the pivot axis (28) and act against each other. This vane pump is very failsafe because, if the control valve (16) cannot be actuated, a high pump pressure at the pump outlet is set.

IPC 8 full level
F04C 2/344 (2006.01); **F04C 14/22** (2006.01)

CPC (source: EP)
F04C 2/3442 (2013.01); **F04C 14/226** (2013.01)

Citation (applicant)
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