

Title (en)
VARIABLE DISPLACEMENT LUBRICANT PUMP

Title (de)
SCHMIERMITTELPUMPE MIT VARIABLER VERDRÄNGUNG

Title (fr)
POMPE DE GRAISSAGE À CYLINDRÉE VARIABLE

Publication
EP 4240973 A1 20230913 (EN)

Application
EP 20803829 A 20201109

Priority
EP 2020081508 W 20201109

Abstract (en)
[origin: WO2022096134A1] A variable displacement lubricant pump (10), comprising a housing (12), a housing cover (16), a rotor hub (35), a shiftable control ring (15), provided with a variable eccentricity and a pumping chamber (25), wherein the pumping chamber (25) comprises a suction zone (S), a discharge zone (D) and a neutral zone (N), the neutral zone (N) is provided with a switchable pressure relief valve (50) to temporarily fluidically connect the suction opening (18) with the discharge opening (19) via the passing pumping compartment (40'), the pressure relief valve (50) comprises a valve opening (52) at the sidewall (13) of the housing (12) and a valve body (56) defined by the control ring (15), so that the valve opening (52) is not or partially covered by the control ring (15) at non-maximum-eccentricity values (eVn) and is completely covered by the control ring (15) at a maximum eccentricity value (eVmax).

IPC 8 full level
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CPC (source: EP)
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See references of WO 2022096134A1

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