

Title (en)

Variable displacement lubricant vane pump

Title (de)

Verstellbare Schmiermittelverdrängungspumpe mit Flügeln

Title (fr)

Pompe à ailettes à cylindrée variable pour lubrifiant

Publication

EP 2735740 B1 20180124 (EN)

Application

EP 12194435 A 20121127

Priority

EP 12194435 A 20121127

Abstract (en)

[origin: EP2735740A1] A variable displacement lubricant vane pump (10) is provided with a pump rotor (20) rotating around a rotor axis (21) and with a rotor body (24) provided with vane slits (25) wherein shiftable rotor vanes (26) are arranged. A shiftable control ring (30) is provided wherein the slidable vanes (26) are rotating, the control ring (30) being actuated to control the eccentricity of the control ring (30) with respect to the rotor axis (21). A metal pump housing (12) including two parallel sidewalls (16, 17) is provided which axially cover the rotor body (24), the rotor vanes (26) and the control ring (30). The control ring (30; 30') is provided with a control ring body (31; 31') made out of the same plastic material with a thermal expansion coefficient a P of 65% to 150% of the thermal expansion coefficient a M of the housing metal.

IPC 8 full level

F04C 2/348 (2006.01); **F04C 14/22** (2006.01)

CPC (source: EP)

F04C 2/348 (2013.01); **F04C 14/223** (2013.01); **F04C 2210/206** (2013.01); **F05C 2201/021** (2013.01); **F05C 2225/00** (2013.01); **F05C 2251/046** (2013.01); **F05C 2253/04** (2013.01)

Cited by

CN108430675A; DE102014102643A1; CN113994096A; DE102014203193A1; DE102014203193B4; US11982272B2; US11396811B2; US9920756B2; WO2017112499A1; WO2019114949A1

Designated contracting state (EPC)

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