

Title (en)
DISPLACEMENT MACHINE ACCORDING TO THE SPIRAL PRINCIPLE

Title (de)
VERDRÄNGERMASCHINE NACH DEM SPIRALPRINZIP

Title (fr)
MACHINE DE REFOULEMENT CONSTRUITE SELON LE PRINCIPE DE LA SPIRALE

Publication
EP 2137412 B1 20121205 (DE)

Application
EP 07720172 A 20070601

Priority
• CH 2007000275 W 20070601
• CH 6292007 A 20070417

Abstract (en)
[origin: WO2008124950A1] A bearing (12) is disposed between the hub (13) of the disc (3) of the displacement body (2) and an eccentric disc (9) connected to a drive shaft (6). A lubricant supply system (24) is provided for lubricating the bearing (12), conveying lubricant through a lubricant supply channel (32) in the interior of the drive shaft (6) to a first lubricant chamber (37) disposed on one side of the bearing (12). On the other side of the bearing (12) is a second lubricant chamber (39) connected to a lubricant return line (43) by a lubricant return channel (33). The two lubricant chambers (37, 39) are sealed off from the pumping chamber (20, 20') by means of ring-shaped sealing elements (38, 40). The lubricant return line (43) is connected to a pressure control valve (45) from which a return line (46) leads away. Said pressure control valve (45) ensures that the difference between the pressure in the pumping chamber (20, 20') acting on one side of the sealing element (38, 40) and the pressure in the lubricant chambers (37, 39) acting on the other side of said sealing element (38, 40) is kept substantially constant.

IPC 8 full level
F04C 27/00 (2006.01); **F04C 18/02** (2006.01)

CPC (source: EP US)
F04C 27/009 (2013.01 - EP US); **F04C 18/0215** (2013.01 - EP US); **F04C 2270/21** (2013.01 - EP US)

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2008124950 A1 20081023; CN 101652569 A 20100217; CN 101652569 B 20121212; EP 2137412 A1 20091230; EP 2137412 B1 20121205; US 2010034682 A1 20100211; US 8051813 B2 20111108

DOCDB simple family (application)
CH 2007000275 W 20070601; CN 200780052596 A 20070601; EP 07720172 A 20070601; US 57816409 A 20091013