

Title (en)
MAGNETIC COUPLING PUMP

Title (de)
MAGNETKUPPLUNGSPUMPE

Title (fr)
POMPE A ACCOUPLEMENT MAGNETIQUE

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Abstract (en)
[origin: WO2017162775A1] The invention relates to a magnetic drive pump (10), comprising: a housing (12) at least partially filled with a conveyed fluid; an impeller chamber (14) surrounded by the housing (12); a pump shaft (22); an impeller (24), which is arranged in the impeller chamber (14) on the pump shaft (22); a bearing (26), which supports the pump shaft (22) in the housing (12); a separating can (18), which surrounds a coupling chamber (20); a rotor (50), which is arranged in the coupling chamber (20) on the pump shaft (22); a ring (16), which is retained in the housing and supports the bearing (26) and separates the impeller chamber (14) from the coupling chamber (20); a channel (28) formed in the ring (16) for conveying a partial flow of the fluid to be conveyed from the impeller chamber (14) to the bearing (26) for the purpose of lubricating the bearing (26), wherein at least part of the conveyed fluid that exits the bearing (26) enters the coupling chamber (20). The problem addressed by the invention is that of improving such a magnetic drive pump in such a way that secure and reliable lubrication of the bearing (26) of the pump shaft (22) is ensured over a certain period of time even if the pump (10) is in dry operation, i.e., if the pump continues to run while conveyed fluid is no longer present on the suction side of the pump (10). The invention solves said problem in that the coupling chamber (20) is closed fluid-tight with respect to the impeller chamber (14).

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