

Title (en)

A submerged pump having a bearing lubricated by discharged fluid

Title (de)

Tauchpumpe mit fluidgeschmierter Lagervorrichtung

Title (fr)

Pompe immergée avec pallier lubrifié par le fluide refoulé

Publication

EP 1519053 A2 20050330 (EN)

Application

EP 04023215 A 20040929

Priority

JP 2003338540 A 20030929

Abstract (en)

A target fluid discharged from a pump (12) is partially diverted, by a lead-in duct (58), into a housing chamber (49) including a motor (32) therein. A top bearing (50) supporting a motor shaft (36) is placed in the lead-in duct (58), and lubricated by the target fluid flowing through the lead-in duct (58). A top seal (60) is installed downstream from the top bearing (50) in the lead-in duct (58). The top seal (60) has a slight gap from the motor shaft (36) to form a throttle structure which increases a flow resistance. The throttle structure maintains a pressure in an area near the top bearing (50), to thereby suppress presence of gases.

IPC 1-7

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IPC 8 full level

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CPC (source: EP US)

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Cited by

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