

Title (en)
GEAR PUMP OR MOTOR

Publication
EP 0064239 B1 19850213 (DE)

Application
EP 82103446 A 19820423

Priority
US 26014281 A 19810504

Abstract (en)
[origin: US4386893A] In a gear pump or motor having a housing and at least two intermeshing gears, one of the gears being fixed to a rotatable shaft and the other being a shaftless gear having a plurality of gear teeth rotatable on a film of fluid in close proximity to an interior surface of the housing, the improvement being a unique tooth profile on the shaftless gear. Each gear tooth on the shaftless gear has a thick top land, preferably at least twice as thick as the top land on each gear tooth on the gear fixed to the rotatable shaft. This particular intermeshing gear tooth configuration increases the bearing surface of the shaftless gear on the film of fluid within the interior of the housing to better support the shaftless gear and thereby reduce frictional wear.

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F04C 2/14

IPC 8 full level
F04C 2/18 (2006.01); **F03C 2/08** (2006.01); **F04C 2/08** (2006.01); **F04C 2/14** (2006.01)

CPC (source: EP US)
F04C 2/084 (2013.01 - EP US)

Cited by
DE102012205406A1; EP0833056A3; EP2674570A1; DE102013226852A1; US6283734B1; WO2015134194A1

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EP 82103446 A 19820423; AT 82103446 T 19820423; BR 8202516 A 19820430; CA 400690 A 19820408; DE 3262290 T 19820423; ES 279686 U 19820503; JP 7329682 A 19820430; US 26014281 A 19810504; ZA 823016 A 19820503