

Title (en)
INTERNAL GEAR PUMP

Publication
EP 0254077 B1 19901114 (DE)

Application
EP 87109295 A 19870627

Priority
• DE 3624517 A 19860719
• DE 3704548 A 19870213

Abstract (en)
[origin: US4813853A] A hydraulic gear pump is disclosed wherein the meshing teeth of the gears define fluid cells which are expanded in the intake portion and receive the fluid from an inlet, and then compressed in the discharge portion to expel the fluid. The contact ratio of the cooperating driving flanks of the meshing teeth is smaller than the contact ratio of the cooperating sealing flanks of the meshing teeth, which serves to minimize the power requirement of the pump. The inlet to the pump includes at least two parallel lines which are each connected to a tank, and the first line is provided with a fixed throttle and the second line is provided with a pressure control valve which is controlled by the pressure in the pump discharge line.

IPC 1-7
F04C 2/10

IPC 8 full level
F04C 2/08 (2006.01); **F04C 2/10** (2006.01); **F04C 15/06** (2006.01)

CPC (source: EP US)
F04C 2/084 (2013.01 - EP US); **F04C 2/102** (2013.01 - EP US); **F04C 15/068** (2013.01 - EP US)

Cited by
DE3737961A1; CN102852787A; DE4107704A1; WO2013092966A3

Designated contracting state (EPC)
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DOCDB simple family (publication)
EP 0254077 A2 19880127; **EP 0254077 A3 19880309**; **EP 0254077 B1 19901114**; DE 3766177 D1 19901220; DE 3772775 D1 19911010; EP 0362906 A2 19900411; EP 0362906 A3 19900530; EP 0362906 B1 19910904; ES 2022841 B3 19911216; ES 2024708 B3 19920301; US 4813853 A 19890321

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EP 87109295 A 19870627; DE 3766177 T 19870627; DE 3772775 T 19870627; EP 89122024 A 19870627; ES 87109295 T 19870627; ES 89122024 T 19870627; US 7364787 A 19870715