

Title (en)  
PISTON PUMP WITH ROTATING PISTON

Publication  
**EP 0204263 B1 19891213 (DE)**

Application  
**EP 86107301 A 19860529**

Priority  
DE 3520233 A 19850605

Abstract (en)  
[origin: US4708605A] Both the rotating drive and also the back and forth movement of the pump piston (5) occurs through a joint arrangement (29), which consists of a first trough (65) on the crank (28), a second trough (67) on the piston (5) and a rolling member (30) which is received in the troughs (65, 67). The troughs are pressed by a springy ring (68) against the rolling member (30). The troughs (65, 67) have a slightly smaller curvature than the rolling member (30), so that the rolling member (30) rolls in the troughs (65, 67). Friction in the joint arrangement (29) is avoided through this, which results in a long life of the joint arrangement (29).

IPC 1-7  
**F04B 7/06**

IPC 8 full level  
**F04B 1/14** (2006.01); **F04B 7/06** (2006.01); **F04B 9/02** (2006.01)

CPC (source: EP US)  
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Cited by  
EP0464301A1; EP0482774A3; EP0686767A3; EP0512688B1

Designated contracting state (EPC)  
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DOCDB simple family (publication)  
**US 4708605 A 19871124**; AT E48677 T1 19891215; DE 3520233 C1 19860731; DE 3667524 D1 19900118; EP 0204263 A2 19861210; EP 0204263 A3 19880727; EP 0204263 B1 19891213; JP H0641748 B2 19940601; JP S6238881 A 19870219

DOCDB simple family (application)  
**US 87012786 A 19860602**; AT 86107301 T 19860529; DE 3520233 A 19850605; DE 3667524 T 19860529; EP 86107301 A 19860529; JP 12935386 A 19860605