

Title (en)  
Manual pump

Title (de)  
Handpumpe

Title (fr)  
Pompe manuelle

Publication  
**EP 0953763 B1 20060621 (DE)**

Application  
**EP 99108348 A 19990428**

Priority  
DE 29807533 U 19980428

Abstract (en)  
[origin: EP0953763A2] The pump piston is connected to a cam by a joint which is formed between the cam and pump cylinder by a pivot engaging in a recess in the piston and in a hole in the cam, and extending parallel to the axial direction of the shaft. The pump piston is located in the cylinder with a large clearance and has at least one elastic seal fitted in a slot to counteract this.

IPC 8 full level  
**F04B 9/14** (2006.01); **F04B 53/14** (2006.01)

CPC (source: EP)  
**F04B 9/14** (2013.01)

Cited by  
EP3121445A1

Designated contracting state (EPC)  
DE FR IT NL SE

DOCDB simple family (publication)  
**DE 29906713 U1 19991028**; DE 29807533 U1 19980924; DE 59913577 D1 20060803; EP 0953763 A2 19991103; EP 0953763 A3 20000816; EP 0953763 B1 20060621

DOCDB simple family (application)  
**DE 29906713 U 19990415**; DE 29807533 U 19980428; DE 59913577 T 19990428; EP 99108348 A 19990428