

Title (en)
Pump piston filled with hollow spheres

Title (de)
Hohlkolben mit Hohlkugelfüllung

Title (fr)
Piston de pompe rempli de sphères creuses

Publication
EP 1336756 B1 20061018 (DE)

Application
EP 03001458 A 20030122

Priority
DE 10206729 A 20020218

Abstract (en)
[origin: EP1336756A2] The piston cavity (8) is at least partially filled with a hollow bead packing (2) which is bonded to the main piston body (7) by sintering. The cavity extends over at least part of the axial length of the main piston body. An Independent claim is also included for a method for making the hollow piston.

IPC 8 full level
F04B 1/12 (2006.01)

CPC (source: EP)
F04B 1/124 (2013.01)

Cited by
US9915248B2; WO2014206683A1

Designated contracting state (EPC)
DE FR GB IT SE

DOCDB simple family (publication)
EP 1336756 A2 20030820; EP 1336756 A3 20031203; EP 1336756 B1 20061018; DE 10206729 A1 20030918; DE 10206729 B4 20040205;
DE 50305393 D1 20061130

DOCDB simple family (application)
EP 03001458 A 20030122; DE 10206729 A 20020218; DE 50305393 T 20030122