

Title (en)

Plunger-slipper assembly of high-pressure pump

Title (de)

Kolben-Slipper-Anordnung einer Hochdruckpumpe

Title (fr)

Ensemble piston-glissière d'une pompe haute-pressure

Publication

**EP 1975406 A1 20081001 (EN)**

Application

**EP 07105244 A 20070329**

Priority

EP 07105244 A 20070329

Abstract (en)

A plunger-slipper assembly of a high-pressure pump is herein claimed. The plunger-slipper assembly comprises a plunger and a slipper. The plunger has a first end and a second end, which are both spherical ends. The slipper comprises a coaxial hole for receiving the plunger and the coaxial hole has a spherical space formed at the extremity thereof for accommodating the second end of the plunger. The first end of the plunger juts out from the slipper. Further, the diameter of the coaxial hole of the slipper is slightly larger than the diameter of the plunger. An oil-filling channel lengthwise penetrates the plunger through the first end to the second end thereof. An oil-guiding channel radially penetrates the wall of the slipper and connects with the extremity of the coaxial hole. A first annular groove is deposited at the outer wall of the slipper. A third annular groove is also deposited surrounding the outer wall of the slipper. An annular stuff is settled in the third annular groove. The disclosed plunger-slipper structure operates in a high-pressure pump to provide a relatively larger stroke and to retard the abrasion thereof.

IPC 8 full level

**F04B 1/12** (2006.01)

CPC (source: EP)

**F04B 1/124** (2013.01)

Citation (search report)

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