Title (en)

BIASED SEAL ASSEMBLY FOR HIGH PRESSURE FLUID PUMP

Title (de)

DICHTUNGSANORDNUNG UNTER VORSPANNUNG FÜR EINE HOCHDRUCKPUMPE

Title (fr)

ENSEMBLE JOINT SOLLICITE POUR POMPE A LIQUIDE SOUS PRESSION ELEVEE

Publication

EP 1015768 A1 20000705 (EN)

Application

EP 98948308 A 19980917

Priority

- US 9819410 W 19980917
- US 93269097 A 19970918
- US 7170698 A 19980501

Abstract (en)

[origin: WO9914500A1] A method and apparatus for biasing a seal assembly in a high pressure fluid pump. In one embodiment, the fluid pump includes a reciprocating plunger, a seal carrier disposed about the plunger, and a seal supported by the seal carrier and sealably engaged with the plunger. The seal may be biased toward the seal carrier with a spring and may include a flange that engages the spring to restrict lateral motion of a spring relative to the reciprocating plunger. The flange may engage an inner and/or an outer surface of the spring. Where the spring is a coil spring, the flange may be continuous around the circumference of the spring or may include a plurality of spaced apart projections located around the circumference of the spring.

IPC 1-7 (main, further and additional classification)

F04B 53/16

IPC 8 full level (invention and additional information)

F04B 53/16 (2006.01)

CPC (invention and additional information)

F04B 53/164 (2013.01)

Citation (search report)

See references of WO 9914500A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family

WO 9914500 A1 19990325; AT 257910 T 20040115; AU 9490498 A 19990405; CA 2303103 A1 19990325; CA 2303103 C 20031125; DE 69821125 D1 20040219; DE 69821125 T2 20041111; EP 1015768 A1 20000705; EP 1015768 B1 20040114; ES 2214731 T3 20040916; JP 2001516846 A 20011002; JP 4409761 B2 20100203; TW 490535 B 20020611