

Title (en)

An improvement to high pressure hydraulic breech mechanisms

Title (de)

Verbesserter hydraulischer Verschlussmechanismus

Title (fr)

Amélioration aux mécanismes hydrauliques de culasse

Publication

EP 1712869 A1 20061018 (EN)

Application

EP 06007489 A 20060410

Priority

GB 0507382 A 20050412

Abstract (en)

By providing an annular chamber 7 and a vent 11 to the radial gap between bolt 10 and high pressure cylinder 3, located between a seal 8 and a body of fluid 13 the operating range of the seal 8 will not be exceeded . The flow rate of fluid from reservoir 13 into the annular chamber 7 is restricted by the radial gap between bolt 10 and high pressure cylinder 3 . The cross sectional area of both annular chamber 7 and vent 11 are greater than that of the radial gap between bolt 10 and high pressure cylinder 3 therefore fluid cannot enter annular chamber 7 at sufficient rate to cause a pressure rise in annular chamber 7 thus seal 8 is isolated from fluid at pressures above its safe operating range . Similar protection may be applied to any seal in the mechanism .

IPC 8 full level

F41A 3/90 (2006.01)

CPC (source: EP US)

F41A 3/90 (2013.01 - EP US)

Citation (search report)

- [X] DE 737264 C 19430709 - KRUPP AG
- [A] GB 139541 A 19200311 - HUGH WILLIAM MAUNSELL GABBETT
- [A] EP 0403452 A2 19901219 - BOFORS AB [SE]

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

EP 1712869 A1 20061018; GB 0507382 D0 20050518; GB 2425162 A 20061018; GB 2425162 B 20070411; US 2006225565 A1 20061012

DOCDB simple family (application)

EP 06007489 A 20060410; GB 0507382 A 20050412; US 39009106 A 20060328