

Title (en)
Suction and force plunger pump.

Title (de)
Pumpe mit Ansaug- und Verdrängerkolben.

Title (fr)
Pompe à piston d'aspiration et de refoulement.

Publication
EP 0317716 A2 19890531 (EN)

Application
EP 88114447 A 19880905

Priority
IT 370287 A 19871123

Abstract (en)
The suction and force plunger pump has at least one pumping chamber (31) in which a suction and force plunger (18), actuated by a cross-head crank system (14), is inserted at a packing-gland sealing device (32, 33). While said plunger is connected to said cross-head by means of a quick coupling (19), the packing-gland device is mounted so as to be extractable from said pumping chamber through an opening (23) thereof opposite to said cross-head and, at the same opening, its casing (35) is axially but not tangentially engaged by a ring (37) which is normally adapted to ensure the sealing lock between said chamber (31), said casing (35) and said ring (37) and vice versa to determine the extraction of the packing-gland device and, if said coupling is open, of the related plunger.

IPC 1-7
F04B 15/02; **F04B 21/00**; **F04B 21/02**; **F04B 21/08**

IPC 8 full level
F04B 15/02 (2006.01); **F04B 53/10** (2006.01); **F04B 53/14** (2006.01); **F04B 53/16** (2006.01)

CPC (source: EP)
F04B 15/02 (2013.01); **F04B 53/1092** (2013.01); **F04B 53/1097** (2013.01); **F04B 53/147** (2013.01); **F04B 53/166** (2013.01)

Cited by
EP1260712A3; CN106321398A; CN107990022A; DE4314132A1; EP0403445A3; GB2287758A; US5611681A; GB2287758B; WO2010147826A3; US8105055B2

Designated contracting state (EPC)
BE CH DE ES FR GB IT LI NL SE

DOCDB simple family (publication)
EP 0317716 A2 19890531; **EP 0317716 A3 19890809**; **EP 0317716 B1 19911127**; DE 3866519 D1 19920109; ES 2027358 T3 19920601; IT 1213730 B 19891229; IT 8703702 A0 19871123

DOCDB simple family (application)
EP 88114447 A 19880905; DE 3866519 T 19880905; ES 88114447 T 19880905; IT 370287 A 19871123