

Title (en)

METHOD FOR ASSEMBLING A HIGH-PRESSURE PRECOMPRESSION PUMP

Title (de)

VERFAHREN ZUR MONTAGE EINER HOCHDRUCKVORVERDICHTUNGSPUMPE

Title (fr)

PROCÉDÉ D'ASSEMBLAGE D'UNE POMPE À PRÉCOMPRESSION HAUTE PRESSION

Publication

**EP 3969751 B1 20240501 (FR)**

Application

**EP 20740689 A 20200511**

Priority

- FR 1905014 A 20190514
- FR 2020050765 W 20200511

Abstract (en)

[origin: WO2020229759A1] The invention relates to a method for assembling a fluid product dispensing pump, comprising the following steps: - providing a piston (1) secured to an actuation rod (2); - providing a pump body (3) having a pump chamber (5); - providing a sleeve (50) which is advantageously secured to a fixing ring (4); - providing an outlet valve element (39) which slides during actuation in a sealed manner in the pump chamber (5); - providing an inlet valve element (10) which slides in a sleeve (9) of the pump body (3), said sleeve (9) having a reduced diameter; - providing a spring (20); said method comprising the following steps: - fixing said outlet valve element (39) in said piston (1); - inserting said piston (1) and said outlet valve element (39) into said sleeve (50), said insertion being carried out from the bottom in the direction of flow of the fluid during its expulsion; - inserting said spring (20) and said inlet valve element (10) into said sleeve (9) of reduced diameter, said insertion being carried out from the top in the direction opposite to the flow of the fluid during its expulsion, so as to wedge said spring (20) between the bottom of said sleeve (9) and said inlet valve element; - inserting said sleeve (50) into said pump body (3), said insertion being carried out from the top in the direction opposite to the flow of the fluid during its expulsion.

IPC 8 full level

**B05B 11/10** (2023.01); **F04B 9/14** (2006.01); **F04B 13/00** (2006.01)

CPC (source: EP US)

**B05B 11/1039** (2023.01 - EP US); **F04B 9/14** (2013.01 - EP); **F04B 13/00** (2013.01 - EP); **F04B 39/0016** (2013.01 - US); **F04B 39/14** (2013.01 - US); **F04B 53/143** (2013.01 - US); **B05B 11/1047** (2023.01 - EP); **B05B 11/1069** (2023.01 - EP)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**WO 2020229759 A1 20201119**; BR 112021021722 A2 20211221; CN 113825907 A 20211221; CN 113825907 B 20230630; EP 3969751 A1 20220323; EP 3969751 B1 20240501; FR 3096089 A1 20201120; FR 3096089 B1 20220805; JP 2022533075 A 20220721; US 2022220955 A1 20220714

DOCDB simple family (application)

**FR 2020050765 W 20200511**; BR 112021021722 A 20200511; CN 202080035432 A 20200511; EP 20740689 A 20200511; FR 1905014 A 20190514; JP 2021567803 A 20200511; US 202017595256 A 20200511