

Title (en)

PUMP, IN PARTICULAR HIGH-PRESSURE FUEL PUMP

Title (de)

PUMPE, INSBESONDERE KRAFTSTOFFHOCHDRUCKPUMPE

Title (fr)

POMPE, EN PARTICULIER POMPE À CARBURANT HAUTE PRESSION

Publication

EP 2635797 B1 20151007 (DE)

Application

EP 11770768 A 20111017

Priority

- DE 102010043512 A 20101105
- EP 2011068097 W 20111017

Abstract (en)

[origin: WO2012059315A1] The pump has at least one pump element (18), having a pump piston (20) which is guided in a cylinder bore (22) of a housing part (24) and is driven indirectly by a drive shaft (14) in a reciprocating movement. The pump piston (20) is supported on the drive shaft (14) via a supporting element (42) and a roller (46) which is mounted rotatably in the supporting element (42), wherein the supporting element (42) is guided at least indirectly in the direction of the reciprocating movement of the pump piston (20). The supporting element (42) and the pump piston (20) are loaded towards the drive shaft (14) by a spring (50), wherein, at its end which faces the drive shaft (14), the spring (50) is connected to the supporting element (42) such that it cannot be rotated about its longitudinal axis (21) and, at its end which faces away from the drive shaft (14), is connected to a housing part (24) such that it cannot be rotated about its longitudinal axis (21). The pump piston (20) is connected fixedly to the supporting element (42), and the supporting element (42) is guided only via the pump piston (20) in the direction of the reciprocating movement of the pump piston (20).

IPC 8 full level

F02M 59/10 (2006.01); **F04B 1/04** (2006.01)

CPC (source: EP)

F02M 59/102 (2013.01); **F04B 1/0417** (2013.01); **F04B 1/043** (2013.01); **F04B 1/0439** (2013.01)

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)

DE 102010043512 A1 20120510; CN 103201499 A 20130710; CN 103201499 B 20161005; EP 2635797 A1 20130911; EP 2635797 B1 20151007; WO 2012059315 A1 20120510

DOCDB simple family (application)

DE 102010043512 A 20101105; CN 201180052756 A 20111017; EP 11770768 A 20111017; EP 2011068097 W 20111017