

Title (en)
HIGH-PRESSURE PUMP

Title (de)
HOCHDRUCKPUMPE

Title (fr)
POMPE HAUTE PRESSION

Publication
EP 3572664 A4 20200101 (EN)

Application
EP 18741821 A 20180123

Priority
• CN 201710058832 A 20170123
• CN 2018073787 W 20180123

Abstract (en)
[origin: EP3572664A1] A high-pressure pump, comprising: a pressure chamber, a plunger sleeve (3) disposed in the pressure chamber, and a protruding member (8) disposed at an outer side of the plunger sleeve (3) and in interference fit to the wall of the pressure chamber. The plunger sleeve (3) comprises a first section (31) and a second section (32) connected to the first section (31). The protruding member (8) is disposed on an outer side of the second section (32) close to the first section (31). The protruding member (8) divides the pressure chamber into a first pressure chamber (1) and a second pressure chamber (2), and the first section (31) is located in the first pressure chamber (1). By lowering the protruding member (8), under the premise of the same volumetric efficiency, the high-pressure pump has a larger plunger clearance in the oil sucking stage, less wear to the plunger set, and a longer service life.

IPC 8 full level
F02M 59/44 (2006.01); **F02M 59/10** (2006.01)

CPC (source: CN EP)
F02M 59/102 (2013.01 - EP); **F02M 59/44** (2013.01 - CN EP); **F02M 59/442** (2013.01 - EP)

Citation (search report)
• [XY] US 2012195780 A1 20120802 - MATSUMOTO TEPPEI [JP], et al
• [Y] DE 102008040090 A1 20100107 - BOSCH GMBH ROBERT [DE]
• [Y] EP 2941562 A1 20151111 - CONTINENTAL AUTOMOTIVE GMBH [DE]
• [X] DE 102004063074 A1 20060706 - BOSCH GMBH ROBERT [DE]
• See references of WO 2018133876A1

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

Designated extension state (EPC)
BA ME

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EP 3572664 A1 20191127; **EP 3572664 A4 20200101**; **EP 3572664 B1 20220518**; CN 106762299 A 20170531; CN 106762299 B 20230620; WO 2018133876 A1 20180726

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