

Title (en)
A high pressure fluid rail

Title (de)
Hochdruckflüssigkeitsschiene

Title (fr)
Rail fluide haute pression

Publication
EP 2511517 A1 20121017 (EN)

Application
EP 12155871 A 20120217

Priority
• EP 11162593 A 20110415
• EP 12155871 A 20120217

Abstract (en)
A high pressure fluid feed device (1) for a common rail system for a large internal combustion engine comprises a pressure accumulator unit (7) for supplying high pressure fluid to a plurality of fluid injectors (8), and the pressure accumulator unit (7) has an outer circumferential surface (16) and is disposed with a central bore (11) substantially extending along the longitudinal axis (14) of the pressure accumulator unit (7) and having an inner circumferential surface (15) and at least one radial bore (13) extending from the central bore (11) to the outer circumferential surface (16) of the pressure accumulator unit (7). The radial bore (13) has a width (22) measured in a plane normal to the longitudinal axis (14) of the pressure accumulator unit (7), which is greater at the inner circumferential surface (15) than at the outer circumferential surface (16) and decreasing continuously from the inner circumferential surface (15) to the outer circumferential surface (16) preferably for at least half of the distance between the inner circumferential surface (15) and the outer circumferential surface (16), and the radial bore (13) has a first lateral wall (18) and a second lateral wall (19), whereby the width (22) is measured as the distance between the first and second lateral walls (18, 19) of the radial bore (13) in a plane containing the central axis (17) of the radial bore and arranged normally to the longitudinal axis (14) of the pressure accumulator unit (7).

IPC 8 full level
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CPC (source: EP KR)
F02M 55/025 (2013.01 - EP KR); **F02M 2200/03** (2013.01 - EP KR); **F02M 2200/80** (2013.01 - KR)

Citation (applicant)
• EP 1413744 A1 20040428 - WAERTSILAE NSD SCHWEIZ AG [CH]
• WO 2008145818 A2 20081204 - WAERTSILAE FINLAND OY [FI], et al
• EP 1426607 A1 20040609 - WAERTSILAE NSD SCHWEIZ AG [CH]
• EP 1413744 A1 20040428 - WAERTSILAE NSD SCHWEIZ AG [CH]
• EP 2299102 A1 20110323 - OMT OHG TORINO S P A [IT]

Citation (search report)
• [X] FR 2756609 A1 19980605 - USUI KOKUSAI SANGYO KK [JP]
• [A] DE 19949963 A1 20010426 - BOSCH GMBH ROBERT [DE]
• [A] DE 19948339 C1 20001214 - BOSCH GMBH ROBERT [DE]
• [A] DE 10305078 A1 20040422 - BOSCH GMBH ROBERT [DE]

Cited by
CN110625328A; EP3587789A1

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