

Title (en)
FUEL PUMP

Title (de)
KRAFTSTOFFPUMPE

Title (fr)
POMPE À CARBURANT

Publication
EP 4155529 A4 20240626 (EN)

Application
EP 21809678 A 20210205

Priority
• JP 2020088872 A 20200521
• JP 2021004252 W 20210205

Abstract (en)
[origin: EP4155529A1] Provided is a fuel pump capable of improving volumetric efficiency. The fuel pump of the present invention includes: a pump body 1 in which a pressurizing chamber 11 is formed; a plunger 2 that reciprocates in the pressurizing chamber 11; a discharge valve mechanism 8 that discharges fuel in the pressurizing chamber 11 to a discharge chamber 87; and a relief valve mechanism 4. The relief valve mechanism 4 opens when a difference between a pressure of the fuel in the discharge chamber 87 and a pressure of the fuel in the pressurizing chamber 11 exceeds a set value, and returns the fuel in the discharge chamber 87 to the pressurizing chamber 11. As viewed from a first direction along which the plunger 2 reciprocates, the discharge valve mechanism 8 and the relief valve mechanism 4 are disposed in a direction where the moving directions of the respective valve elements 82, 43 intersect with each other. The relief valve mechanism 4 is disposed at a position that overlaps with the pressurizing chamber 11 in the first direction and in a second direction that is a moving direction of the valve element 43 of the relief valve mechanism 4.

IPC 8 full level
F02M 59/46 (2006.01); **F04B 53/10** (2006.01)

CPC (source: EP)
F02M 59/46 (2013.01); **F02M 61/16** (2013.01); **F04B 1/053** (2013.01); **F04B 49/03** (2013.01); **F04B 53/1032** (2013.01)

Citation (search report)
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• [YA] WO 2019131049 A1 20190704 - HITACHI AUTOMOTIVE SYSTEMS LTD [JP]
• [A] CN 109488552 A 20190319 - DAI YANCHANG
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• See also references of WO 2021235019A1

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)
EP 4155529 A1 20230329; EP 4155529 A4 20240626; CN 115398091 A 20221125; JP 7385750 B2 20231122; JP WO2021235019 A1 20211125; WO 2021235019 A1 20211125

DOCDB simple family (application)
EP 21809678 A 20210205; CN 202180029009 A 20210205; JP 2021004252 W 20210205; JP 2022524885 A 20210205