

Title (en)  
FUEL PUMP

Title (de)  
KRAFTSTOFFPUMPE

Title (fr)  
POMPE À CARBURANT

Publication  
**EP 4155529 A4 20240626 (EN)**

Application  
**EP 21809678 A 20210205**

Priority  
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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.

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CPC (source: EP)  
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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)  
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