

Title (en)  
HIGH-PRESSURE FUEL SUPPLY PUMP AND MANUFACTURING METHOD

Title (de)  
HOCHDRUCKBRENNSTOFFFÖRDERPUMPE UND HERSTELLUNGSVERFAHREN

Title (fr)  
POMPE DE DISTRIBUTION DE CARBURANT À HAUTE PRESSION ET SON PROCÉDÉ DE FABRICATION

Publication  
**EP 4137694 A4 20240508 (EN)**

Application  
**EP 21788498 A 20210129**

Priority  
• JP 2020072225 A 20200414  
• JP 2021003171 W 20210129

Abstract (en)  
[origin: EP4137694A1] Provided is a high-pressure fuel supply pump capable of improving strength of a flange without increasing a plate thickness. A flange 13 includes a step portion 13b1 (first step portion), a step portion 13b2 (second step portion), and a flat portion 13e1 (first flat portion). The step portion 13b1 protrudes in a direction away from a fuel pump attachment portion 90 on an outer periphery of the flange 13. The step portion 13b2 protrudes in a direction away from the fuel pump attachment portion 90 on the outer periphery of the flange 13, and faces the step portion 13b1 with the pump body 1 interposed therebetween. The flat portion 13e1 (first flat portion) is located between the step portion 13b1 and the step portion 13b2, and is flat from the pump body 1 to a first end of the flange 13.

IPC 8 full level  
**F02M 59/44** (2006.01); **F02M 59/48** (2006.01); **F04B 53/16** (2006.01)

CPC (source: EP)  
**F02M 59/44** (2013.01); **F02M 59/48** (2013.01); **F04B 1/0404** (2013.01); **F04B 1/0408** (2013.01); **F04B 1/0426** (2013.01); **F04B 11/0016** (2013.01); **F04B 23/02** (2013.01); **F04B 23/103** (2013.01); **F04B 49/065** (2013.01); **F04B 53/1082** (2013.01); **F04B 53/16** (2013.01); **F02M 2200/803** (2013.01); **F04B 2205/063** (2013.01)

Citation (search report)  
• [X] KR 20190016921 A 20190219 - CONTINENTAL AUTOMOTIVE GMBH [DE]  
• [X] US 2019145366 A1 20190516 - HEINEMANN EYK [DE], et al  
• [X] US 2016032879 A1 20160204 - FLO SIAMEND [DE], et al  
• See also references of WO 2021210243A1

Designated contracting state (EPC)  
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DOCDB simple family (publication)  
**EP 4137694 A1 20230222; EP 4137694 A4 20240508**; CN 115398090 A 20221125; CN 115398090 B 20231020; JP 7295337 B2 20230620; JP WO2021210243 A1 20211021; WO 2021210243 A1 20211021

DOCDB simple family (application)  
**EP 21788498 A 20210129**; CN 202180027291 A 20210129; JP 2021003171 W 20210129; JP 2022515211 A 20210129