

Title (en)
IN-TANK SOLENOID FUEL PUMP

Title (de)
IN-TANK-ELEKTROMAGNETKRAFTSTOFFPUMPE

Title (fr)
POMPE A COMBUSTIBLE A SOLENOIDE PLACEE DANS UN RESERVOIR

Publication
EP 1336751 B1 20060524 (EN)

Application
EP 02798805 A 20020902

Priority

- JP 0208892 W 20020902
- JP 2001276258 A 20010912

Abstract (en)
[origin: EP1336751A1] The in-tank type electromagnetic fuel pump of the present invention is characterized in comprising a cylinder 6 that forms a pressurizing chamber 5, a plunger 7 which is slidably mounted inside this cylinder, an inner yoke which is attached to the outer circumference of the cylinder, and a bobbin which is disposed so as to surround the inner yoke, and around which a solenoid coil that excites the plunger is wound, and characterized in that a fuel circulation passage is formed on the outside of the cylinder along the longitudinal direction of the cylinder, and the opposite end portions of this fuel circulation passage open into the interior of the fuel tank in the vicinity of the opposite end portions of the cylinder in the longitudinal direction of the cylinder. By devising in this manner, it is an object of the present invention to provide an in-tank type electromagnetic fuel pump which can prevent vapor from entering the pressurizing chamber, even if heat is generated by the solenoid coil itself and by the sliding movement of the plunger and vapor is generated in the fuel. <IMAGE>

IPC 8 full level
F02M 37/10 (2006.01); **F02M 37/08** (2006.01); **F02M 37/20** (2006.01); **F04B 17/04** (2006.01)

CPC (source: EP)
F02M 37/103 (2013.01); **F02M 37/20** (2013.01)

Cited by
DE102015118529A1; US7377266B2; US10619628B2; US8694230B2; WO2010135161A1; WO2006060942A1; WO2024168047A1

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
EP 1336751 A1 20030820; EP 1336751 A4 20050511; EP 1336751 B1 20060524; CN 1498307 A 20040519; DE 60211643 D1 20060629; JP 2003083194 A 20030319; TW 587124 B 20040511; WO 03025383 A1 20030327

DOCDB simple family (application)
EP 02798805 A 20020902; CN 02802837 A 20020902; DE 60211643 T 20020902; JP 0208892 W 20020902; JP 2001276258 A 20010912; TW 91120887 A 20020912