

Title (en)
Internal combustion engine with a fuel supply system

Title (de)
Verbrennungsmotor mit Kraftstoffzuführeinrichtung

Title (fr)
Moteur à combustion interne avec un système d'alimentation en carburant

Publication
EP 2602471 A3 20141217 (DE)

Application
EP 12008129 A 20121205

Priority
DE 102011120468 A 20111207

Abstract (en)
[origin: EP2602471A2] The engine (12) has a fuel supply device with fuel pump (34), fuel pressure damper (36) and injection valve (26). The pressure damper has damper membrane (54) that separates the damper chamber (53) and damper back chamber (56) from each other. The damper back chamber is loaded with first reference pressure. The pressure of fuel supplied by the fuel pump to injection valve is regulated by fuel pressure regulator (35) based on the second reference pressure of pressure regulator. The first reference pressure and second reference pressure are adjusted relative to each other.

IPC 8 full level
F02M 37/00 (2006.01); **F02M 1/16** (2006.01); **F02M 37/16** (2006.01); **F02M 69/10** (2006.01); **F02M 69/54** (2006.01)

CPC (source: EP US)
F02M 1/16 (2013.01 - EP US); **F02M 37/0023** (2013.01 - EP US); **F02M 37/007** (2013.01 - EP US); **F02M 37/16** (2013.01 - EP US); **F02M 69/54** (2013.01 - US)

Citation (search report)
• [XY] EP 0280923 A2 19880907 - WALBRO CORP [US]
• [Y] DE 3435248 A1 19860403 - AUDI AG [DE]
• [Y] US 5488933 A 19960206 - PHAM ROGER N C [US]
• [Y] US 4205637 A 19800603 - ITO HIROSHI [JP], et al
• [A] US 3805758 A 19740423 - MAY M

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CN106884781A

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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 2602471 A2 20130612; EP 2602471 A3 20141217; EP 2602471 B1 20170308; CN 103174571 A 20130626; DE 102011120468 A1 20130613; JP 2013119861 A 20130617; US 2013146028 A1 20130613

DOCDB simple family (application)
EP 12008129 A 20121205; CN 201210522125 A 20121207; DE 102011120468 A 20111207; JP 2012268187 A 20121207; US 201213707625 A 20121207