

Title (en)
Fuel pump assembly

Title (de)
Brennstoffpumpenanordnung

Title (fr)
Ensemble de pompe à carburant

Publication
EP 2639444 A1 20130918 (EN)

Application
EP 12158980 A 20120312

Priority
EP 12158980 A 20120312

Abstract (en)
A fuel pump assembly for use in an internal combustion engine comprises a pump housing (10), at least first and second pumping plungers (16a, 16b) for pressurising fuel within a respective one of first and second pumping chambers (20a, 20b); and first and second tappets (22a, 22b), each being associated with a respective one of the pumping plungers and being driven, in use, by an engine-driven cam, so as to drive a pumping stroke of the tappet and the associated plunger during which fuel within the associated pumping chamber is pressurised. Each tappet (22a, 22b) defines an internal volume (24a, 24b) for housing, at least in part, an associated return spring (34a) which drives a return stroke of the tappet and the associated plunger during which the associated pumping chamber is filled with fuel. A return circuit (50a, 50b, 52a, 52b, 54) is provided by which the internal volume (24a) of the first tappet (22a) is in constant communication with the internal volume (24b) of the second tappet (22b) so that fuel displaced from the internal volume during the pumping stroke of the first tappet fills the internal volume of the second tappet so as to aid the return stroke of the second tappet.

IPC 8 full level
F02M 59/06 (2006.01); **F02M 59/10** (2006.01); **F04B 1/04** (2006.01)

CPC (source: EP)
F02M 59/06 (2013.01); **F02M 59/102** (2013.01); **F04B 1/043** (2013.01)

Citation (search report)

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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

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BA ME

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