

Title (en)
FUEL SUPPLY DEVICE

Title (de)
KRAFTSTOFFVERSORGUNGSEINRICHTUNG

Title (fr)
DISPOSITIF D'ALIMENTATION DE COMBUSTIBLE

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Abstract (en)
[origin: WO2014057093A1] The invention relates to a fuel supply device (1) for an internal combustion engine (2), in particular of a vehicle, comprising a fuel tank (3) with a tank volume (4), comprising a flow line (5) for conducting the fuel from the fuel tank (3) to the internal combustion engine (2), comprising a return line (6) for conducting unused fuel from the internal combustion engine (2) to the fuel tank (3), comprising a fuel pump (7) arranged in the flow line (5), comprising, in the interior of the fuel tank (3), a flow conduit (8) of the flow line (5) and/or a return conduit (9) of the return line (6), and comprising a swirl pot (10) which is arranged in the fuel tank (3) and the pot volume (11) of which is separated from the tank volume (4) of the fuel tank (3), wherein the swirl pot (10) is connected to the suction side of the fuel pump (7). It is provided that the fuel supply device (1) has an ejector pump (18) and/or a check valve (28) which are arranged in the fuel tank (3) and which connect the tank volume (4) to the pot volume (11) in order to fill the swirl pot (10), wherein the ejector pump (18) is connected via a feed line (19) to the flow line (5) and/or to the return line (6) in order to be supplied with a drive flow, wherein the feed line (19) is connected to the flow line (5) and/or to the return line (6) by means of a regulating valve (29) that is controllable as a function of the volume flow ratio between the flow line (5) and return line (6), and/or the ejector pump (18) is oriented with its delivery direction parallel to the vertical, in particular parallel to the vertical vehicle axis. The invention also describes a fuel supply device (1) for an internal combustion engine (2), which fuel supply device serves for supplying fuel to a heating device (300), in particular to an engine-independent heater of a vehicle.

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