

Title (en)

TURBINE PUMP WITH IMPROVED EFFICIENCY FOR MOTOR VEHICLE FUEL TANK

Title (de)

TURBINENPUMPE MIT VERBESSERTEM WIRKUNGSGRAD INSBESONDERE FÜR FAHRZEUGKRAFTSTOFFBEHÄLTER

Title (fr)

POMPE TURBINE A RENDEMENT AMELIORE NOTAMMENT POUR RESERVOIR DE CARBURANT DE VEHICULE AUTOMOBILE

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Application

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Abstract (en)

[origin: FR2768192A1] The invention concerns a turbine pump, in particular for a motor vehicle fuel tank, comprising a housing (100) forming a stator and a rotor (200) with blades (220, 230) mounted in rotation relative to the housing (100) and defining a path for pressure build-up and circulation between an input (134) and an output (124). The invention is characterised in that the rotor (200) has two annular series of concentric blades (220, 230) radially internal and radially external respectively, adapted to define a fuel path alternately passing through passages (222) defined by the radially internal blades (220) and through passages (232) defined by the radially external blades (230) such that the path follows a generally helical configuration resting on an annular shell, the two series of blades (220, 230) being respectively arranged on the inside and on the outside of a ring (250), the radially internal series of blades (220) ensuring the connection between the ring (250) inner periphery and a central plate (210) periphery such that said blades (220) define a series of annular passages (222) passing through the rotor (200) along its thickness, and closed on the periphery, whereas a second ring (260) is arranged on the outside of the series of external blades (230) such that the latter define a series of annular passages (232) passing through the rotor (200) along its thickness, and closed on the periphery.

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