

Title (en)

METHOD AND DEVICE FOR OPERATING AN INTERNAL COMBUSTION ENGINE

Title (de)

VERFAHREN UND VORRICHTUNG ZUM BETREIBEN EINER BRENNKRAFTMASCHINE

Title (fr)

PROCÉDÉ ET DISPOSITIF PERMETTANT DE FAIRE FONCTIONNER UN MOTEUR À COMBUSTION INTERNE

Publication

EP 2906803 A1 20150819 (DE)

Application

EP 13785826 A 20131004

Priority

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Abstract (en)

[origin: WO2014056798A1] An internal combustion engine (1) has a pressure accumulator (20), a high-pressure pump (22), a controllable actuator, and a rotatably mounted camshaft (27) with a longitudinal axis. The high-pressure pump (22) comprises a cylinder chamber and a pump piston (31) which is movably arranged in the cylinder chamber. The pump piston (31) is supported at least indirectly on the camshaft (27) and thus influences an open volume of the cylinder chamber depending on a rotation of the camshaft (27). The cylinder chamber of the high-pressure pump (22) is hydraulically coupled at least indirectly to the pressure accumulator (20) in order to pump the fluid into the pressure accumulator (20). The actuator is designed and arranged to drive the camshaft (27) such that the camshaft (27) rotates about the camshaft longitudinal axis in a specified angular range into a first direction or into an opposite second direction. The method has the following steps: the high-pressure pump (22) is controlled during a specified time period prior to an expected motor start such that the high-pressure pump is in a self-priming operating state and the actuator is controlled such that the camshaft (27) rotates about the camshaft longitudinal axis in the specified angular range at least once into the first direction and at least once into the second direction.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

See references of WO 2014056798A1

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