

Title (en)

METHOD AND DEVICE FOR CRANKING AN INTERNAL COMBUSTION ENGINE

Title (de)

VERFAHREN UND VORRICHTUNG ZUM ANLASSEN EINER VERBRENNUNGSKRAFTMASCHINE

Title (fr)

PROCÉDÉ ET DISPOSITIF DE DÉMARRAGE D'UN MOTEUR À COMBUSTION INTERNE

Publication

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Application

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Abstract (en)

[origin: WO2014095195A1] The invention relates to a device (1) and a method for cranking an internal combustion engine (2), wherein a crankshaft (3) is coupled in rotationally elastic fashion to a rotor (6) of a cranking motor (4), wherein, in a cranking process, the cranking motor (4) generates a cranking torque (AM) which is transmitted via the rotationally elastic coupling to the crankshaft (3), wherein, at a starting time of the cranking process, a negative or positive cranking torque (AM) is generated, wherein at least one change in sign of the cranking torque (AM) occurs during the cranking process, wherein a rotation of the crankshaft (3) is mechanically blocked before or at the starting time, wherein the rotation of the crankshaft (3) is enabled when or after the amount of energy stored in a rotary oscillation system reaches the maximum admissible amount of energy or an amount of energy required for cranking the internal combustion engine (2), wherein the rotary oscillation system is composed at least of the rotationally elastic coupling and the rotor (6) of the cranking motor (4).

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