

Title (en)

METHOD FOR DIMENSIONING A MAGNETIC CIRCUIT OF AN ELECTROMAGNETIC ACTUATOR FOR CONTROLLING A CLOSURE MEMBER FOR A HEAT ENGINE INJECTOR, AND ELECTROMAGNETIC DEVICE

Title (de)

VERFAHREN ZUR BEMESSUNG EINER MAGNETSCHALTUNG EINES ELEKTROMAGNETISCHEN AKTUATOR ZUR STEUERUNG EINES VERSCHLUSSELEMENTS EINES WÄRMEDER KRAFTMASCHINENINJEKTORS UND ELEKTROMAGNETISCHES BAUELEMENT

Title (fr)

PROCEDE DE DIMENSIONNEMENT D'UN CIRCUIT MAGNETIQUE D'UN ACTUATEUR ELECTROMAGNETIQUE DE COMMANDE D'UN OBTURATEUR POUR INJECTEUR DE MOTEUR THERMIQUE ET DISPOSITIF ELECTROMAGNETIQUE

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Application

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Abstract (en)

[origin: WO2011070303A1] The invention relates to an electromagnetic device for operating a movable closure member forming part of a fuel supply circuit of a heat engine injector. The device includes a tubular body defining a housing containing an electromagnetic actuator for actuating the movable closure member, said actuator comprising a magnetic circuit formed by different parts, in particular the movable closure member and a core surrounded by a winding through which an excitation current flows that allows a magnetic induction to be created in the magnetic circuit. According to the invention, at least two parts of the magnetic circuit have: magnetic flux passage sections of different values; and materials (M1, M2, M3) with different magnetic polarization (J) saturation values (JsatM1, JsatM2, JsatM3), such that the constituent components of the magnetic circuit (12) reach the magnetic polarization (J) saturation value thereof for substantially the same value of current flowing in the winding.

IPC 8 full level

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