

Title (en)

METHOD FOR POSITIONAL DETERMINATION FOR AN EC MOTOR

Title (de)

VERFAHREN ZUR LAGEBESTIMMUNG BEI EINEM EC-MOTOR

Title (fr)

PROCEDE POUR DETERMINER UNE POSITION SUR UN MOTEUR A COMMUTATION ELECTRONIQUE

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Application

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Abstract (en)

[origin: WO2006029592A1] The invention relates to a method for positional determination for an EC motor (14) on a device for the adjustment of the rotational angular position of the camshaft (11) of a reciprocating piston combustion engine relative to the crankshaft (12), whereby a positional measuring signal is tracked on each occurrence of a state change for a sensor signal from magnetic field sensors arranged on the stator of the EC motor (14), provided for detection of magnetic poles of the EC rotor. On error-free measurement, the sensor signal passes through a series of sensor signal states which occur at least twice per mechanical rotation of the rotor. The series of sensor signal states is determined and recorded. A fine correction of the positional measurement signal is carried out by means of the stored series, when the series of the measured sensor signal values differs from the stored series. Furthermore, the rotational angle of the crankshaft (12) of the internal combustion engine is determined and, by means of the rotational angle and a drive parameter of an epicyclic drive for the camshaft adjuster device, a coarse adjustment of the positional measurement signal can be carried out on determining a positional measurement error which can not be eliminated by the fine correction.

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