

Title (en)

METHOD FOR ADJUSTING AN ANGLE OF ROTATION, AND PHASE DISPLACEMENT DEVICE FOR CARRYING OUT SAID METHOD

Title (de)

VERFAHREN ZUR REGELUNG EINES VERDREHWINKELS SOWIE PHASENVERSTELLVORRICHTUNG ZUR DURCHFÜHRUNG EINES DERARTIGEN VERFAHRENS

Title (fr)

PROCEDE POUR REGLER L'ANGLE DE ROTATION ET DISPOSITIF DE DEPHASAGE POUR METTRE EN OEUVRE CE PROCEDE

Publication

EP 1682751 A2 20060726 (DE)

Application

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Abstract (en)

[origin: WO2005047657A2] The invention relates to a method for adjusting a relative angle of rotation (F) between a camshaft and a crankshaft by means of an electromechanical phase displacement device. The aim of the invention is to achieve a rapid and precise adjustment behaviour. To this end, a displacement speed regulating difference (<O) between a nominal displacement speed (ONOM) and an actual displacement speed (OACT) calculated from at least one measuring variable is calculated in a second control loop for adjusting a displacement speed (O), beneath a first control loop for adjusting the relative angle of rotation (F). An output variable is calculated according to the displacement speed regulating difference (?O), by means of a displacement speed adjuster (26) located beneath an angle of rotation adjuster (23), said output variable being used to displace the relative angle of rotation (F) by means of an electromechanical adjusting element (14). The relative angle of rotation (F) can be rapidly and precisely adjusted by adjusting the displacement speed (O). The invention also relates to a phase displacement device for adjusting the relative angle of rotation (F).

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