

Title (en)

METHOD AND DEVICE FOR THE CONTROL AND DIAGNOSIS OF AN EXHAUST GAS TURBOCHARGER

Title (de)

VERFAHREN UND VORRICHTUNG ZUM STEUERN UND ZUM DIAGNOSTIZIEREN EINES ABGASTURBOLADERS

Title (fr)

PROCEDE ET DISPOSITIF DE COMMANDE ET DE DIAGNOSTIC D'UN TURBOCOMPRESSEUR A GAZ D'ECHAPPEMENT

Publication

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Application

EP 05792105 A 20050919

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Abstract (en)

[origin: WO2006045674A1] The invention relates to an exhaust gas turbocharger which comprises a compressor (20) and a turbine (18) having an adjusting drive (22) for adjusting a turbine geometry. A performance characteristic (P_KW) is determined depending on a turbine output (P_TUR), a mass flow (MF_TUR) through the turbine (18) and a gas temperature (T3) upstream of the turbine (18). A mass flow characteristic (MF_KW) is determined depending on the mass flow (MF_TUR) through the turbine (18) and the gas temperature (T3) upstream of the turbine (18) and a gas pressure (P4) downstream of the turbine (18). Depending on the performance characteristic (P_KW) and the mass flow characteristic (MF_KW), an adjuster position (PSN_VTG) of the adjusting drive (22) for adjusting the turbine geometry is determined using a characteristic diagram (KF_PSN_VTG). For control, an adjusting signal (SSG_VTG) for controlling the adjusting drive is determined depending on the adjuster position (PSN_VTG) for adjusting the turbine geometry. For diagnosis of the exhaust gas turbocharger, the exhaust gas turbocharger is diagnosed depending on the adjuster position (PSN_VTG).

IPC 8 full level

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