Title (en)

METHOD FOR EARLY DETECTION OF DAMAGE IN A MOTOR VEHICLE TRANSMISSION

Title (de)

VERFAHREN ZUR FRÜHZEITIGEN SCHADENSERKENNUNG IN EINEM KRAFTFAHRZEUGGETRIEBE

Title (fr)

PROCÉDÉ DE DÉTECTION PRÉCOCE DE DOMMAGES DANS UNE TRANSMISSION DE VÉHICULE AUTOMOBILE

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Application

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Abstract (en)

[origin: WO2011018289A1] The invention relates to a method for the early detection of damage in a motor vehicle transmission, comprising at least one acceleration sensor, by means of which mechanical vibrations in the motor vehicle transmission are captured (S1) and converted into an electrical signal (a(t)) (S2), wherein the electrical signal (a(t)) is then digitalized (S3) and a comparison to a comparison parameter (aG) is then performed (S4), wherein the capturing of the mechanical vibrations is further performed at defined operating points of the motor vehicle transmission and acceleration amplitudes over a time curve (t) are determined from the digitalized electrical signal (a(t)), wherein states (Z(t)) are counted at which the acceleration amplitudes exceed the comparison parameter (aG), and wherein a calculated probability (P(t)) for damage to the motor vehicle transmission is determined (S5) using a number of the states (Z(t)). The invention further relates to a motor vehicle transmission, the damage thereof being able to be determined by means of the above method, and to a computer program product for performing the individual process steps.

IPC 8 full level

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