

Title (en)

METHOD AND DEVICE FOR DETERMINING DAMAGE, WEAR AND/OR IMBALANCE IN A TRANSMISSION, PARTICULARLY AN EPICYCLIC TRANSMISSION

Title (de)

VERFAHREN UND VORRICHTUNG ZUR BESTIMMUNG VON BESCHÄDIGUNG, VERSCHLEISS UND/ODER UNWUCHT IN EINEM GETRIEBE, INSBESONDERE EINEM UMLAUFRÄDERGETRIEBE

Title (fr)

PROCÉDÉ ET DISPOSITIF PERMETTANT DE DÉTERMINER UN ENDOMMAGEMENT, UNE USURE ET/OU UN DÉSÉQUILIBRE DANS UNE TRANSMISSION, EN PARTICULIER DANS UNE TRANSMISSION PLANÉTAIRE

Publication

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Application

EP 18724141 A 20180419

Priority

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Abstract (en)

[origin: WO2018193049A1] The invention particularly relates to a method for determining damage, wear and/or imbalance in a transmission designed as a gear wheel transmission, particularly an epicyclic transmission (100), by means of at least one electronic sensor device (Se1-Se5), wherein an ensemble averaging for measurement values or measurement value progressions ($(P1, n)^{*}Sew, i$), repeatedly detected in a phase synchronous manner at a measurement point, is automatically and periodically carried out during operation of the transmission (100) in order to determine an ensemble average ($\langle s(w)_{ref} > P1, n \rangle$) for the measurement point. According to the invention, the ensemble average ($\langle s(w) > *P1, n \rangle$) is compared by means of an electronic evaluation logic (AL) to at least one reference value or reference progression ($\langle s(w)_{ref} > P1, n \rangle$) in order to output an indication of a possible damage, excess wear and/or an occurring imbalance within the transmission (100) in case of a deviation of the ensemble average ($\langle s(w) > *P1, n \rangle$) from the at least one reference value or reference progression ($\langle s(w)_{ref} > P1, n \rangle$) beyond at least one threshold value.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

See references of WO 2018193049A1

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