

Title (en)

SYSTEM FOR DETERMINING OPERATING PARAMETERS OF A GEAR ELEMENT

Title (de)

SYSTEM ZUR ERMITTLUNG VON BETRIEBSPARAMETERN EINES GETRIEBEELEMENTES

Title (fr)

SYSTÈME DE DÉTERMINATION DE PARAMÈTRES DE FONCTIONNEMENT D'UN ÉLÉMENT DE TRANSMISSION

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Application

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Abstract (en)

[origin: WO2015107142A1] The invention relates to a system for determining operating parameters of a gear element (8, 9, 10) that is moveable in relation to a base, in particular a gear element (8, 9, 10) in a planetary gear set (7), said system comprising: at least one passive RFID sensor unit (2) having a sensor (6), an energy-supply unit, a transmission unit and an antenna (3b); and an RFID reader (1) having an antenna (3a), wherein the RFID reader (1) is arranged on the base (13), and the RFID sensor unit (2) is arranged on a gear element (8, 9, 10). According to the invention, in order to guarantee continuous and secure data acquisition, the antenna (3a) of the RFID reader (1) and the antenna (3b) of the RFID sensor unit (2) are arranged in relation to one another in such a way that, during the relative movement, the antenna (3b) of the RFID sensor unit (2) moves substantially in the antenna field region of the antenna (3a) of the RFID reader (1), such that a substantially uninterrupted transfer of energy and/or data is guaranteed.

IPC 8 full level

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See references of WO 2015107142A1

Citation (examination)

S HÄRMÄ ET AL: "8 Surface Acoustic Wave RFID Tags", 28 February 2009 (2009-02-28), XP055533485, Retrieved from the Internet <URL:https://pdfs.semanticscholar.org/d852/2fb7bd7b28b08c81fb78cbcccc6474b9c889.pdf> [retrieved on 20181212]

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