

Title (en)

METHOD FOR ASSESSING A WEAR STATE OF A MODULE OF A TURBOMACHINE, MODULE, AND TURBOMACHINE

Title (de)

VERFAHREN ZUR BEURTEILUNG EINES VERSCHLEISSZUSTANDES EINER BAUGRUPPE EINER STRÖMUNGSMASCHINE, BAUGRUPPE, SOWIE STRÖMUNGSMASCHINE

Title (fr)

PROCÉDÉ D'ÉVALUATION DU DEGRÉ D'USURE D'UN SOUS-ENSEMBLE D'UNE TURBOMACHINE, SOUS-ENSEMBLE, AINSI QUE TURBOMACHINE

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Abstract (en)

[origin: WO2014174097A1] The invention relates to a method for assessing a wear state of a module (1, 11, 111, 112) of a turbomachine, in particular a bearing arrangement (11, 111, 112) of a pump or turbine, wherein a mechanical interrogating signal (21) with a predefinable signal shape is generated by means of a signal transmitter (2) in order to determine a wear characteristic variable, and a response signal (31) which is generated from the interrogating signal (21) is detected by way of a sensor (3) which is in contact with the module (1, 11, 111, 112). According to the invention, the response signal (31) is modified depending on a variation in a physical operating variable of the module (1, 11, 111, 112) according to a characteristic pattern, the wear characteristic variable is determined from the modification of the response signal (31), and the wear state is assessed using the wear characteristic variable. Moreover, the invention relates to a module (1, 11, 111, 112) of a turbomachine having a signal transmitter (2) and a sensor (3), and to a turbomachine having a module (1, 11, 111, 112) of this type.

IPC 8 full level

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Citation (search report)

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US 6360610 B1 20020326 - JARZYNSKI JACEK [US], et al

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