

Title (en)

METHOD FOR CLEAR POSITION DETERMINATION AND IDENTIFICATION OF A TURBINE BLADE

Title (de)

VERFAHREN ZUR EINDEUTIGEN POSITIONSZUORDNUNG UND IDENTIFIZIERUNG EINER TURBINENSCHAUFEL

Title (fr)

PROCÉDÉ D'AFFECTATION DE POSITION ET D'IDENTIFICATION UNIVOQUES D'UNE AUBE DE TURBINE

Publication

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Application

**EP 17768699 A 20170904**

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Abstract (en)

[origin: WO2018046423A1] The invention relates to methods for clear position determination and identification of a turbine blade (11) of a high-pressure turbine stage (10) of a gas turbine (1), particularly an aircraft engine, in the mounted state. The method for the clear position determination of a turbine blade (11) of a high-pressure turbine stage (10) of a gas turbine (1), connected to a high-pressure compressor (30) by means of a shaft (20), where each turbine blade (11) of the high-pressure turbine (10) is recorded on a record card in a clearly identifiable manner with the relative position thereof, comprises the following steps: a) determination of the position of a predefined blade-locking insert (32) of a predefined stage of the high-pressure compressor (30), where the stage of the high-pressure compressor (30) is selected such that the blade-locking insert (32) can be brought into the field of vision of a first boroscope (41) guided through a first boroscope opening (4) on the gas turbine (1), in the fully mounted state of the gas turbine (1) and by rotation of the shaft (20), and clearly identified; and b) marking, on the record card, the turbine blade (11') that is in the field of vision of a second boroscope (42) guided through a second boroscope opening (5) on the gas turbine (1), in the fully mounted state of the gas turbine (1), when the predefined blade-locking insert (32) is in the field of vision of the first boroscope (41). The method for the clear identification of the turbine blade (11') of the high-pressure turbine (10) of a gas turbine (1), marked on the record card according to the invention, comprises the following steps: a) insertion of a first boroscope (41) through a first boroscope opening (4) on the gas turbine (1) and a second boroscope (5) through a second boroscope opening (42) on the gas turbine (1); and b) rotation of the shaft connecting the high-pressure compressor (30) and the high-pressure turbine stage (10) until the predefined blade-locking insert (32) is in the field of vision of the first boroscope (41), whereby the turbine blade (11') marked on the record card is in the field of vision of the second boroscope (42).

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