

Title (en)

METHOD AND DEVICES FOR DETECTING A CRACK IN A RAILWAY WHEEL

Title (de)

VERFAHREN UND VORRICHTUNGEN ZUR DETEKTION EINES RISSES IN EINEM EISENBAHNRAD

Title (fr)

PROCEDE ET DISPOSITIFS POUR DETECTER D'UNE FISSURE DANS UNE ROUE DE CHEMIN DE FER

Publication

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Application

EP 99948656 A 19990716

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Abstract (en)

[origin: WO0005576A2] The invention relates to a method for detecting a crack (9) in a railway wheel (1), according to which by means of a first transmitting ultrasonic transducer (31) a first ultrasonic wave (41) is transmitted substantially tangentially to the wheel circumference through a face (27) of the railway wheel (1), at an angle to the face (27). The transmitted ultrasonic wave (41) is received at the level of said face (27). A first angle of acoustic irradiation (α 1) and a first angle of reception (β 1) are selected such that the incoming ultrasonic wave (41) can be received if it is reflected by the opposite face (43) and deflected backwards at the crack (9). The invention also relates to devices which are especially suited for carrying out said method. Such a device notably comprises a test bogie (74) which is positioned next to or underneath a railway vehicle (70) moving at low speed and can be displaced in the direction of travel (78) of said vehicle. A probe (29A, 29B) can be fixed to said test bogie and placed onto the face (27) situated on the outside or inside in relation to the railway vehicle (70).

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