

Title (en)

METHOD AND APPARATUS FOR MEASURING THE QUALITY OF A TRANSPARENT TUBULAR OBJECT

Title (de)

VERFAHREN UND VORRICHTUNG ZUR MESSUNG DER QUALITÄT EINES TRANSPARENTEN RÖHRENFÖRMIGEN OBJEKTS

Title (fr)

PROCÉDÉ ET APPAREIL PERMETTANT DE MESURER LA QUALITÉ D'UN OBJET TUBULAIRE TRANSPARENT

Publication

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Application

EP 11817229 A 20111010

Priority

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- IB 2011002374 W 20111010

Abstract (en)

[origin: WO2012046136A1] An apparatus for measuring the quality of a tubular body (1) and the geometric position of an alteration or defect or impurities comprises a supply means for causing at least one first radiation beam and a second radiation beam to pass through a point of the object, for example light radiation generated by respective light sources, so that the directions of said first and second beams form a predetermined angle. The radiation beams are subjected each to four refractions when they cross curved surfaces. If in the point a defect is present, the position of the point can be found between a position X and Y on the two video cameras, whereas for an extended defect two limit positions (X1 and X2) (Y1 and Y2) are defined. By detecting, from known positions, the first light beam and the second light beam after that they have crossed the object, in order to determine the light alteration that occurs moving the same by the first and second light beam, a first and a second alteration signals are provided in case the alteration exceeds a predetermined threshold and with the program means a geometric position of the alteration in the object is determined. If the defect is at the surface, it can represent a crack capable of triggering a fracture, causing the object to be extremely vulnerable and destined to an easy break under a minimum action.

IPC 8 full level

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CPC (source: EP)

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