

Title (en)  
METHOD FOR THE PRE-PROCESSING OF A THREE-DIMENSIONAL IMAGE OF THE SURFACE OF A TYRE USING SUCCESSIVE B-SPLINE DEFORMATIONS

Title (de)  
VERFAHREN ZUR VORVERARBEITUNG EINES DREIDIMENSIONALEN BILDES DER OBERFLÄCHE EINES REIFENS MITTELS SUKZESSIVER B-SPLINE-VERFORMUNGEN

Title (fr)  
METHODE DE PRE-TRAITEMENT D'UNE IMAGE TRIDIMENSIONNELLE DE LA SURFACE D'UN PNEUMATIQUE A L'AIDE DE DEFORMATIONS B-SPLINE SUCCESSIVES

Publication  
**EP 2633492 A1 20130904 (FR)**

Application  
**EP 11770805 A 20111020**

Priority  
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Abstract (en)  
[origin: WO2012055752A1] The invention relates to a method for inspecting the surface of a tyre by comparing same with a three-dimensional reference surface, said surfaces comprising embossed markings. The invention comprises the following steps consisting in: determining the three-dimensional profile of the surface to be inspected; extracting the contours of the graphical elements; locating the characteristic points on the surface to be inspected and pairing said points with the corresponding characteristic points of the reference surface, such as to create a set of pairs of paired points; associating a first reset B-Spline surface with the reference surface, by associating the characteristic points of said surface with the control points of the first reset B-Spline surface; and deforming the reference surface, by moving the control points of the first reset B-Spline surface so that they are superimposed on the characteristic points of the surface to be inspected with which they were paired.

IPC 8 full level  
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Citation (search report)  
See references of WO 2012055752A1

Citation (examination)  
• WO 2007102920 A2 20070913 - UNIV MARYLAND [US], et al  
• GOSHTASBY A: "REGISTRATION OF IMAGES WITH GEOMETRIC DISTORTIONS", IEEE TRANSACTIONS ON GEOSCIENCE AND REMOTE SENSING, IEEE SERVICE CENTER, PISCATAWAY, NJ, US, vol. 26, no. 1, 1 January 1988 (1988-01-01), pages 60 - 64, XP000030927, ISSN: 0196-2892, DOI: 10.1109/36.3000

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