

Title (en)
DETERMINATION AND VISUALIZATION OF DAMAGE TO AN ANATOMICAL JOINT

Title (de)
BESTIMMUNG UND VISUALISIERUNG VON SCHÄDEN AN EINEM ANATOMISCHEN GELENK

Title (fr)
DÉTERMINATION ET VISUALISATION D'UNE LÉSION D'UNE ARTICULATION ANATOMIQUE

Publication
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Application
EP 19817291 A 20191210

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- EP 2019084474 W 20191210

Abstract (en)
[origin: WO2020120494A1] In accordance with one or more embodiments herein, a system for determining and visualizing damage to an anatomical joint of a patient is provided. The system comprises a display, at least one manipulation tool, a storage media and at least one processor. The at least one processor is configured to: i) receive a plurality of medical image stacks of at least a part of the anatomical joint from the storage media; ii) obtain a three-dimensional image representation of the at least part of the anatomical joint which is based on at least one of said medical image stacks, by generating said three-dimensional image representation in an image segmentation process based on said medical image stack, or receiving said three-dimensional image representation from the storage media; iii) determine damage to at least one of a plurality of anatomical structures in the anatomical joint by analyzing at least one of said plurality of medical image stacks; iv) mark, based on the determined damage, damage to the anatomical structures in the obtained three-dimensional image representation; v) obtain at least one 3D model for visualization based on the three-dimensional image representation, in which 3D model the marked damage is visualized; and vi) create a graphical user interface for visualization on the display. The graphical user interface may comprise: functionality to visualize and enable manipulation, using the at least one manipulation tool, of the at least one 3D model; functionality to enable removal of the visualization of at least one of the plurality of anatomical structures from the at least one 3D model; functionality to visualize and enable browsing of at least one of the plurality of medical image stacks; and functionality to, in the 3D model, visualize the position of the at least one medical image that is currently visualized.

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