

Title (en)

BIOMECHANICAL DEVICE FOR MEASURING VESSELS AND FOR VOLUMETRIC ANALYSIS OF LIMBS

Title (de)

BIOMECHANISCHE VORRICHTUNG ZUR MESSUNG VON GEFÄßEN UND ZUR VOLUMETRISCHEN ANALYSE VON GLIEDMASSEN

Title (fr)

DISPOSITIF DE MESURES BIOMECHANIQUES DES VAISSEAUX ET D'ANALYSE VOLUMETRIQUE DES MEMBRES

Publication

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Application

EP 16741255 A 20160701

Priority

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Abstract (en)

[origin: CA2992591A1] The invention relates to a system for non-invasive biomorphological characterisation of a human limb (110), comprising a geometric and volumetric measurement device (100) comprising: - a plurality of three-dimensional image acquisition systems (131-137) designed to image said limb (110), - an articulated and motorised frame (120), designed to position and move at least one part of the plurality of acquisition systems (131-137) in a peripheral manner to said limb (110), - a processing device for processing geometric and volumetric data, designed to represent the acquisition data in the form of a plurality of points having a set of coordinates in a three-dimensional reference frame, - a biomechanical measurement device comprising a probe holder (200) designed to rigidly connect at least one ultrasonic probe (210) for imaging the vascular system relating to said limb (110) and a force sensor (220) designed to measure the pressure exerted by said probe (210) on the limb (110), and - an analysis device, designed to both merge at least a part of the volumetric data and at least a part of the anatomical and biomechanical data, and to determine the morphological variables of the limb (110) and/or the biomechanical variables of the vascular system of said limb.

IPC 8 full level

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Citation (search report)

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