

Title (en)

METHOD FOR PERIPROSTHETIC BONE MINERAL DENSITY MEASUREMENT

Title (de)

VERFAHREN ZUR MESSUNG DES MINERALGEHALTES VON KNOCHENGeweBE IN DER UMGEBUNG EINER PROTHESE

Title (fr)

PROCEDE DE MESURE DE LA TENEUR D'UN OS EN MINERAUX AUTOUR D'UNE PROTHESE

Publication

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Application

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Priority

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Abstract (en)

[origin: WO9625086A1] A method of evaluating bone density around a radiolucent composite prosthesis (27) establishes an implant boundary (118, 124) by fitting a stored template to radio-opaque reference markers (31) embedded in the prosthesis. The implant boundary is used to create a measurement boundary (126) displaced from the implant boundary toward the bone (26) producing a conformal region of interest. Matched histograms (130) of bone density in a lateral and medial region of interest may be displayed to evaluate symmetrical stress defects. Alternatively, bone density may be displayed plotted along an axis (132) cutting across the medial and lateral sides. Fiducial points (100, 102, 104, 106, 108, 110) are identified from the bone and implant morphology to ensure that either display will have a repeatable reference, and hence that such displays will be directly comparable to later and earlier displays thereby aiding in the detection of bone change.

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