

Title (en)  
SYSTEMS AND METHODS FOR SPECTROSCOPY OF BIOLOGICAL TISSUE

Title (de)  
VORRICHTUNGEN UND VERFAHREN FÜR DIE SPEKTROSKOPIE VON BIOLOGISCHEM GEWEBE

Title (fr)  
SYSTEMES ET PROCEDES DE SPECTROSCOPIE D UN TISSU BIOLOGIQUE

Publication  
**EP 1495309 A1 20050112 (EN)**

Application  
**EP 03723896 A 20030404**

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Abstract (en)  
[origin: JP2010249835A] <P>PROBLEM TO BE SOLVED: To provide a probe of near-infrared Raman spectroscopy useful for both disease diagnosis and research of a disease progress. <P>SOLUTION: The system for measuring tissue includes a fiber optic probe having a diameter of 2 mm or less. Such a small diameter allows the system concerned to be used for the diagnosis of coronary artery disease or other small lumens or soft tissue with minimal trauma. A delivery optical fiber is included in the probe coupled at the proximal end to a light source. A filter for the delivery fibers is included at the distal end. The system concerned includes a collection optical fiber (or fibers) in the probe that collects Raman scattered radiation from tissue and the collection optical fiber concerned is coupled at the proximal end to a detector. A second fiber is disposed at the distal end of the collection fibers. An optical lens system is disposed at the distal end of the probe, including a delivery waveguide coupled to the delivery fiber, a collection waveguide coupled to the collection fiber and a lens. <P>COPYRIGHT: (C)2011,JPO&INPIT

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