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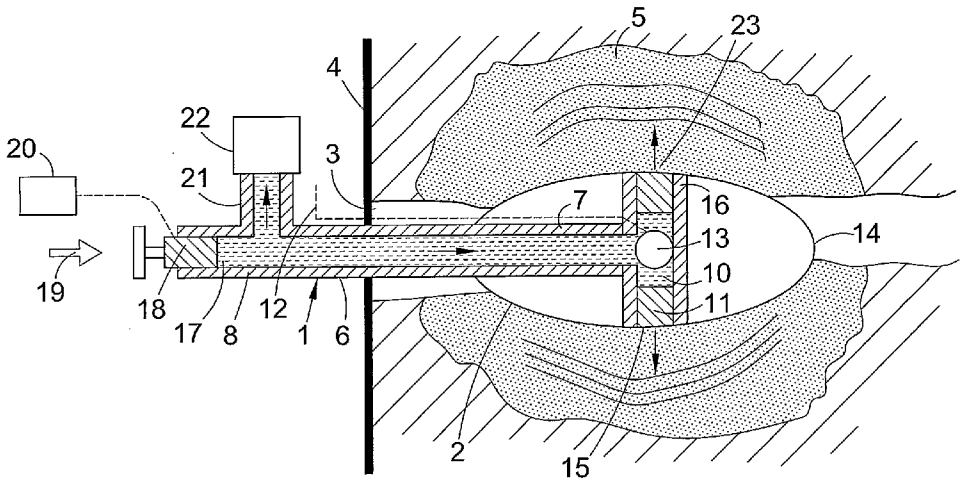
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[Continued on next page]

(54) Title: APPARATUS FOR MAPPING BIOLOGICAL TISSUE QUALITY



(57) Abstract: The present invention provides an apparatus suitable for use in investigating multi-phase biological tissue histology, which apparatus comprises a trans-ductally deployable probe mounting a periodically displaceable body of at least one tactile sensing device, said periodically displaceable body having an excitation frequency bandwidth in the range of from 1 Hz to 500 KHz, a maximum stroke length of less than 1 mm and a displacement force in the range from 0.01 N to 1 N, said displaceable body being provided with a displacement device having a displacement controller for controlling at least said excitation frequency, said displaceable body being coupled to a displacement monitoring device and a displacement force monitoring device, for monitoring the viscoelastic response of said biological tissue to periodic compression by said displacement force applied to said tissue by periodic displacement of said periodically displaceable body. The present invention also includes a method for producing a histological profile of a biological tissue adjacent a body duct, and a diagnostic method, using the apparatus of the invention.

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