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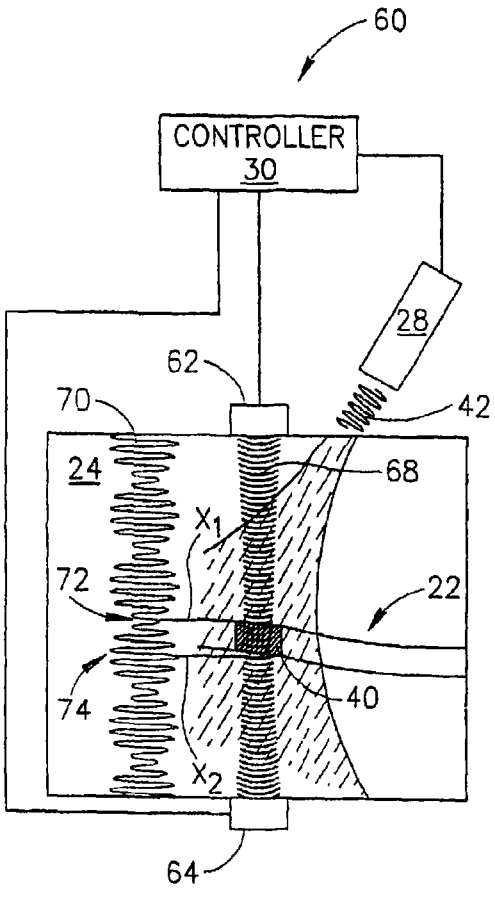
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(54) Title: PHOTOACOUSTIC ASSAY AND IMAGING SYSTEM



(57) Abstract: A method for assaying a component of a localized region of interest in a body comprising: illuminating the region with at least one pulse of radiation having a wavelength at which the radiation is absorbed by the component to generate a change in an acoustic property of the region, transmitting ultrasound so that it is incident on the region, measuring at least one effect of the change on the incident ultrasound; using the measured at least one effect to determine an absorption coefficient for the radiation in the region; and using the determined absorption coefficient to determine concentration of the component in the region.

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