

Biplane Scanning with a High-Frequency, Multifrequency US Instrument for Improved Differentiation of Malignant and Benign Breast Tumors

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A unique instrument which provides for the emission of low (3.5 MHz), medium (4.5-6.5 MHz), or high (8-11 MHz) US frequencies from the same highly sensitive, polymer transducer is in use for scanning symptomatic patients. With this unit, breast masses are automatically scanned, at any of the available frequencies, at two mutually perpendicular planes. The primary aim of these investigations is to determine if the structural features of malignant masses influence the scattering of the US wave in a manner that allows the image patterns of malignant masses to be visually differentiated from the images of benign masses.

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