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(54) **FREQUENCY DOMAIN PROCESSING OF SCANNING ACOUSTIC IMAGING SIGNALS**

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(52) **U.S. Cl.** **600/443; 73/620**

(58) **Field of Search** **600/437, 443-445, 600/447; 73/105, 579, 602, 606, 620, 588, 619, 597, 599**

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(57) **ABSTRACT**

Method and apparatus useful in the inspection of a target comprises scanning the target with a pulsed acoustic beam, sensing the pulsed beam after it has been modified by interaction with the target, producing a time-domain signal indicative of the modifications, processing the time-domain signal to produce a frequency domain representation of the modifications, and producing an image-wise display of the frequency domain representation of the modifications. In one execution disclosed, the frequency domain representation is altered and then reconverted to a time domain signal before display.

77 Claims, 3 Drawing Sheets

