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Shifrin

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(54) **DIAGNOSTIC MEDICAL ULTRASOUND SYSTEMS HAVING A METHOD AND CIRCUITRY FOR FRONT-END GAIN CONTROL**

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(58) Field of Search **330/110, 141, 330/174, 254, 278, 281**

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(57) **ABSTRACT**

A system and method of processing received signals in an ultrasound imaging system is disclosed. In the system, the received signals are amplified by means of a gain controlled amplifier, and the gain of the amplifier is varied, by varying the load capacitance, as a function of depth (time) to compensate for the attenuation of ultrasonic energy at different depths within a patient's body.

20 Claims, 7 Drawing Sheets

