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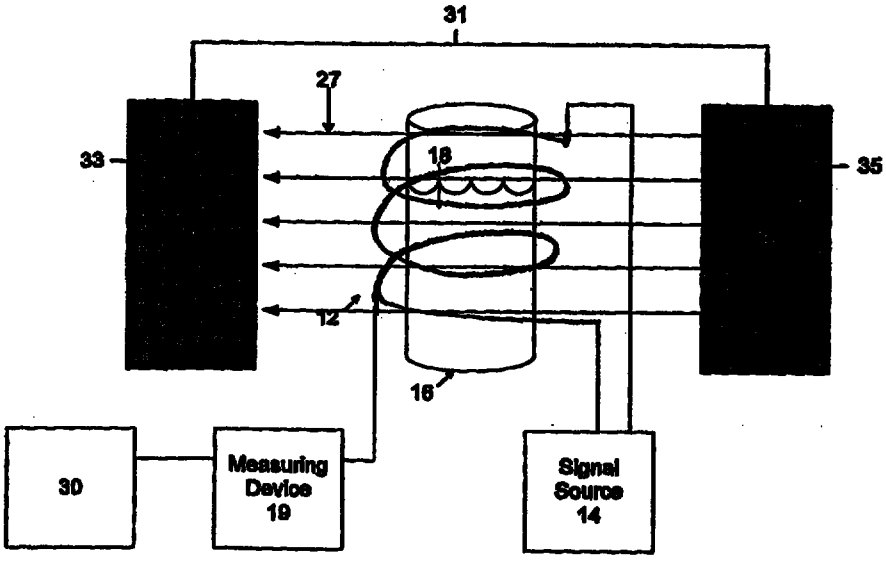
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(54) Title: METHOD AND APPARATUS FOR DETECTING A MAGNETICALLY RESPONSIVE SUBSTANCE



(57) Abstract

This invention is a method and apparatus for detecting in a sample a substance (18) which responds to an applied magnetic field, such as a paramagnetic substance. The sample is placed in a magnetic field, and the effect of the sample on a performance characteristic of an electrical conductor is correlated to the presence of the substance. The first conductor (12) is configured as a coil, and electromagnetic signal source (14) is a current source which applies a current to the first conductor (12). The sample (18) in sample holder (16) can have a measurable effect on the performance of the conductor (12). A measuring device (19) measures the value of a pre-selected performance characteristic of the coil (12). The value measured by the measuring device (19) may be displayed by the computer (30).