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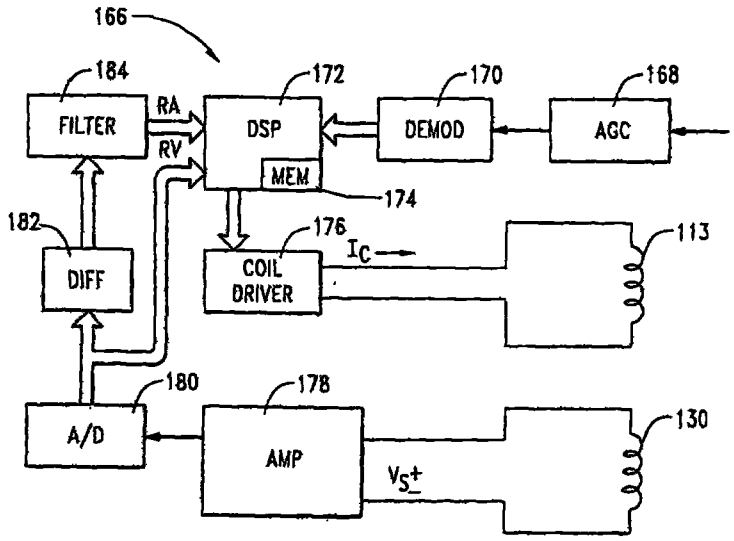
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7031-8

(54) Title: ROTATIONAL VIBRATION DETECTION USING A VELOCITY SENSE COIL



(57) Abstract

An apparatus and method for detecting rotational vibration applied to a disc drive (100) having a rotary actuator (110) adjacent a rotatable disc (106). The actuator (110) supports a head (120) adjacent a recording surface of the disc and an actuator coil (113) in a magnetic field of a magnetic circuit (140) of a voice coil motor (114). A second, velocity sense coil (130) is further coupled to the actuator and immersed in the magnetic field of the magnetic circuit, with the velocity sense coil being electrically isolated from the actuator coil. Rotational vibration is detected in relation to a sense voltage induced across the velocity sense coil as the magnetic circuit is moved relative to the velocity sense coil. A data transfer operation between the head and a host device is interrupted when the magnitude of the rotation vibration exceeds a specified magnitude. A servo circuit (166) applies current to the actuator coil to position the head relative to the disc recording surface in relation to servo information transduced by the head, as well as in relation to the sensed voltage from the velocity sense coil.