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(54) **MONITORING AND CORRECTING FOR NON-TRANSLATIONAL MOTION IN A RESONANCE MEASUREMENT APPARATUS**

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(57) **ABSTRACT**

A system and method for assessing and potentially correcting for non-translational motion in a resonance measurement apparatus is provided. The design measures the response of an article, such as an HGA assembly including a read/write head, as well as the excitation of a shaking device, such as a head resonance tester, and computes a correction factor using either two or three point measurement. The correction factor may be evaluated by subjecting the arrangement to further vibration at varying frequencies. Measurement of the shaking device may be accomplished using an accelerometer or by optical measurement using a light beam.

**35 Claims, 10 Drawing Sheets**

**X MEASUREMENT**

