

**METHOD AND ARRANGEMENT FOR REMOVING NOISE AND
MEASUREMENTS OF HEAD-MEDIA SPACING MODULATION FOR
DIGITAL RECORDING**

ABSTRACT OF THE DISCLOSURE

A method and arrangement for measuring head-media spacing modulation (HMS_Wq) employs a profilometer to measure the surface topography of a disk. A cumulative power spectral density (PSD) distribution is generated from the measured surface topography. Discontinuities and steps are identified in the PSD distribution. The discontinuities and steps are removed to create a corrected PSD distribution. A noise free spectrum is then reconstructed from the corrected PSD distribution.

FIGURE 5