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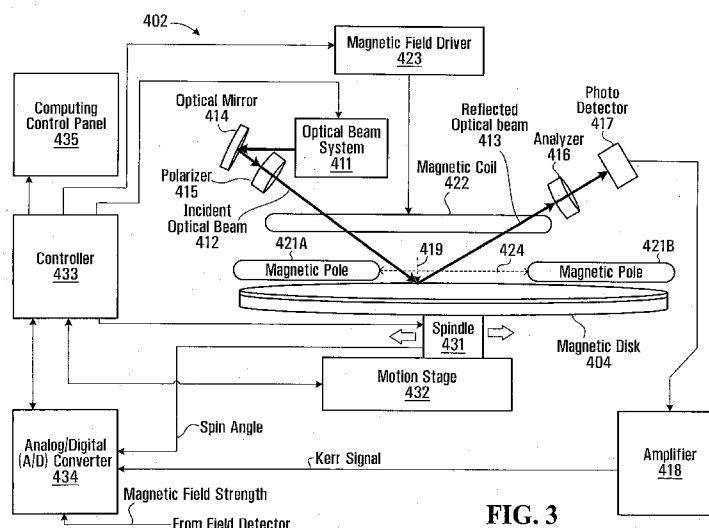


FIG. 3

(57) Abstract: A method and apparatus for testing a magnetic medium. The method comprises applying a magnetic field of a time-varying strength; directing a polarized optical beam towards a portion of the medium that is in the magnetic field, wherein the optical beam is reflected by a surface of the medium at a point of incidence in the magnetic field; moving the medium relative to the optical beam so as to cause the point of incidence to repeatedly traverse each of a plurality of sectors along a track on the surface; obtaining a series of Kerr signal measurements of the reflected optical beam; grouping measurements into ensembles such that the measurements in an individual ensemble are those obtained while the point of incidence was in a corresponding one of the sectors; and determining at least one magnetic property of at least one of the sectors from the measurements in the corresponding ensemble.

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