

**Title: METHOD AND APPARATUS FOR READING CD-ROMS OR THE
LIKE AT MATCHING SPEEDS DETERMINED BY DISK ECCENTRICITIES**

ABSTRACT

A CD-ROM drive is disclosed which is for use with disks having various degrees of spindle hole eccentricity and data track eccentricity. The hole eccentricity of each disk manifests itself during disk rotation as periodic vibration of the disk and, in consequence, periodic departures of the light beam spot from the track to an extent proportional to the speed of disk rotation, whereas the track eccentricity manifests itself during disk rotation as periodic departures of the beam spot from the track to a constant extent regardless of the speed of disk rotation. Therefore, on being loaded into the disk drive, each disk has its hole eccentricity and track eccentricity measured at two different disk eccentricity check speeds in terms of, for example, the amplitude of an eccentricity-caused periodic component of a tracking error signal.

(FIG. 3)