ABSTRACT

PRE-CALIBRATION SYSTEM AND METHOD FOR CD-ROM DRIVE SPEED OPTIMIZATION

A system and method for pre-calibrating a CD-ROM drive for each CD-ROM disc inserted into the drive for maximizing the drive's performance without degradation in data transmission. When a CD-ROM disc is inserted, the disc is rotated to its maximum speed. The system reads a predetermined data segment from the inner most region of the disc. If error is detected, then the speed is lowered until no errors are encountered. The error-free speed is then chosen as the operating speed for the disc. In another embodiment, the disc is separated into multiple zones. The system calibrates each of the zones for its particular maximum error-free speed, and selects the error-free speed as the operating speed for the zone.

Fig. 1