RECORDING INFORMATION ON AN OPTICAL DISC WITHOUT USING PRE-MANUFACTURED TRACKS

ABSTRACT

An apparatus for controlling the spacing between information tracks while recording information on an optical disc that does not have pre-manufactured information tracks. The invention employs a reference scale to precisely determine the position of information tracks to be recorded on an optical disc, wherein spacing of optical tick marks on the reference scale directly correlates to track pitch between information tracks recorded on the optical disc. The invention utilizes a first optical system for reading-from and writing-to an optical disc. A second optical system is used for detecting optical tick marks on the reference scale. The first optical system and the second optical system share common optical components, and are used in cooperation with control means to direct an optical pickup to a desired location of the optical disc for recording an information track thereon.

Figure 1