DATA RECORDING MEDIUM AND DATA RECORDING AND REPRODUCING APPARATUS

Abstract

A method and means is described wherein servo sectors written on a disk (or servo sections written on a tape) are equally spaced on a given track and read during seek, settle and track following operations. An algorithm is used to determine the allowable time separation between servo sectors (or sections) on a track and lengths of associated data sections, such as data sectors or variable length records, that may be accommodated on the disk or tape in such manner that each of the servo sectors (or sections) equally spaced on a given track is located within a data field of a data sector or within an identification region or immediately after an address indicating mark (such as address mark or index mark). The rate at which the servo sector (or section) is sampled is constant and independent of the number and lengths of the data sections. As a result of this independent relationship, this technique is suitable for CLD recording, to banded disks using sectored servo as in conventional FBA, and also even to non-sectored architectures, such as count-key-data (CKD), wherein the data is written in records of variable length, and to tape drives formatted in FBA or CKD.