TRACK PITCH NORMALIZATION METHOD AND APPARATUS

Abstract of the Disclosure

Many parallel tracks on a storage surface of a data handling device are arranged in a longitudinal direction. Each track has a track center comprising reference points for fine lateral positioning. Each successive pair of track centers has a succession of lateral offset distance having an average. Because there are many successive pairs of tracks, there are many average lateral offset distances defining a statistical distribution having a variance.

The device includes a laterally movable transducer head and a longitudinally movable data surface. A signal is received from the transducer head while the data surface moves past the head. Many values each indicative of a lateral offset distance between a corresponding pair of lateral reference points are derived from the received signal. These offset-indicative values are used to shift at least some of the latitudinal reference points laterally so as to reduce this variance by an amount larger than that of any conventional method.

Figure 5