ADJUSTING TRACK DENSITY AND BIT DENSITY TO PROVIDE LIMITED EXCESS CAPACITY IN A STORAGE DEVICE

ABSTRACT OF THE DISCLOSURE

A method sets bit densities and track densities for a plurality of heads in a data storage device. The method includes determining an initial bit density and an initial track density for each head. An initial total capacity for the storage device is determined based on the initial track densities and the initial bit densities. A desired capacity for the storage device is selected and the initial total capacity and the desired capacity are compared. One of either a bit density or a track density is then adjusted so that the data storage device has an adjusted capacity that provides some excess capacity over the desired capacity where the excess capacity is less than any excess capacity that was present between the initial capacity and the desired capacity. A data storage device formed through this method is also provided.

FIG. 2