THREE-STATE SINGLE-PASS RECORDING IN HAMR DEVICE WITH DUAL RECORDING LAYERS

Abstract

A heat-assisted magnetic recording (HAMR) device is configured to write regions of neutral polarity on a magnetic media during a same pass of the recording head in which other regions are written of positive polarity and negative polarity. The various disclosed write techniques may facilitate creation of “zero state” (substantially net zero polarity) transition zones between each pair of data bits of opposite polarity and/or may facilitate the encoding of three different logical states (e.g., 1, 0, and -1) on the media.

Figure 2