MAGNETIC RECORDING DISK HAVING TEXTURED TEST BAND FOR CONTROLLING TEXTURE IN THE SLIDER LANDING ZONE

ABSTRACT

A magnetic recording disk (150) has a textured test band (160) radially spaced from a textured landing zone (158) and has laser-induced bumps with an average height different from those in the zone (158). Both bumps are formed in spiral tracks which are separate and discontinuous. To manufacture the disk (150) (a) the texturing laser (246) operates at a fixed pulse energy to form bumps in the band (160) while the disk (150) rotating; (b) the band (160) is irradiated with a second analyzing laser (312) and the diffracted beam is detected by a linear photodetector array (316) across a range of diffraction angles; (c) the array (316) output is used to compute an average height value of the test band bumps; (d) correction signal(s) modify the laser (246) parameter(s), (e) the disk (150) is translated radially and the band (158) is formed with the modified laser beam (252); and (f) the zone (158) is irradiated with the laser (312) to measure the average height of the zone (158) bumps.

Fig. 6.

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