ABSTRACT

MAGNETIC STORAGE APPARATUS

A magnetic storage apparatus is provided with a perpendicular magnetic recording medium 20 having a disk-shaped substrate 21, a soft magnetic underlayer 22 disposed on the substrate, and a recording layer 25 disposed above the soft magnetic underlayer and having axes of easy magnetization perpendicular to a film surface thereof; and a magnetic head having a medium opposing surface, and a recording element and a reproducing element which are exposed at the medium opposing surface. The soft magnetic underlayer 22 has axes of easy magnetization oriented along a circumferential direction, the recording element has a main magnetic pole part 71 made of a soft magnetic material and applying a recording magnetic field, and a return yoke part made of a soft magnetic material and circulating the recording magnetic field, and the return yoke part includes return side yokes 72 arranged in a radial direction of the main magnetic pole part 71 on the medium opposing surface 52a, whereby a magnetic flux of the recording magnetic field flows in the radial direction within the soft magnetic underlayer 22.

Figure 11.