

ABSTRACT

Before processing for polishing an edge surface of a magnetic-disk substrate is performed, a relationship between a ratio of a particle size of polishing abrasive particles with respect to a particle size of magnetic particles, and a ratio of a polishing rate for a chamfered surface of a substrate with respect to a polishing rate for a side wall surface of the substrate when an edge surface of the substrate is polished using magnetic functional fluid containing the magnetic particles and the polishing abrasive particles that have the ratio of the particle sizes is acquired in advance, the ratio of the particle sizes is set based on a target ratio of a polishing rate for the side wall surface and a polishing rate for the chamfered surface of the substrate that is to be subjected to the edge surface polishing processing, and magnetic functional fluid containing magnetic particles and polishing abrasive particles that achieve the set ratio of the particle sizes is produced. In the edge surface polishing processing, the edge surface of the substrate that is subjected to the edge surface polishing processing is polished by moving the edge surface of the substrate relative to a mass of the magnetic functional fluid formed by a magnetism generation means, in a state in which the edge surface is in contact with the mass.

[Fig. 3]