

ABSTRACT

DISK-SHAPED GLASS SUBSTRATE, MAGNETIC DISK GLASS SUBSTRATE, METHOD OF MANUFACTURING MAGNETIC DISK GLASS SUBSTRATE, AND MAGNETIC DISK

A disk-shaped glass substrate is provided with a pair of main surfaces which are polished while the substrate is retained on a polishing carrier so as to provide a magnetic disk glass substrate. The disk-shaped glass substrate has a roundness of the outer periphery of not more than $1.3\ \mu\text{m}$ and is characterized in that, when a reference circle is determined from a first contour line, which corresponds to the shape of a complete circle of the outer periphery of the disk-shaped glass substrate, using the least-square method, the number of peaks on the first contour line that project outside the reference circle in a radial direction is defined as a first peak count, a reference circle is determined from a second contour line obtained by subjecting the first contour line to a low-pass filter with a cut-off value corresponding to the period at which the number of peaks per full circle is 150, and the number of peaks on the second contour line that project outside the reference circle in the radial direction is defined as a second peak count, the ratio of a second peak count value to a first peak count value is not more than 0.2.

(Figures 1A and 1B)