

ABSTRACT

This invention provides a process for producing a glass substrate which is particularly useful in the production of a magnetic disk for use with a magnetic head flying at a low flying amount of not more than 10 nm, and a process for producing a magnetic disk utilizing the glass substrate. The process for producing the glass substrate for the magnetic disk comprises mirror polishing the glass substrate and cleaning the polished glass substrate. In this process, a polishing agent composed mainly of a rare earth oxide and having a fluorine content of not more than 5% by weight is supplied onto the glass substrate. An abrasive cloth and the glass substrate are moved relatively to mirror-polish the end face of the glass substrate. The polished glass substrate is brought into contact with a cleaning liquid containing ascorbic acid, fluorine ions and not less than 3% by weight of sulfuric acid to dissolve and remove the polishing agent. The concentration of ascorbic acid contained in the cleaning liquid is set to not less than 0.1% by weight, and the content of the fluorine ion is set to not less than 1 ppm and not more than 40 ppm. At least a magnetic layer is formed on the glass substrate for the magnetic disk to prepare a magnetic disk.