GLASS SUBSTRATE FOR MAGNETIC RECORDING MEDIUM, MAGNETIC RECORDING MEDIUM, AND METHOD OF MANUFACTURING THE SAME

ABSTRACT

In a method of manufacturing a glass substrate for a magnetic recording medium for forming a predetermined roughness, a principal surface of the glass substrate is precisely polished by the use of polishing material containing free abrasive grain. Remaining stress distribution for a portion of a polishing trace due to the free abrasive grain is generated on the surface of the glass substrate. A surface process is performed for at least the principal surface of the glass substrate by the use of hydrosilicofluoric acid. A portion having relatively high remaining distortion in the generated remaining stress distribution is decided as an island portion. The glass substrate is heated after precisely polishing before performing the surface process by the use of the hydrosilicofluoric acid.

FIG 3