CLAIMS

1. A method for manufacturing a magnetic-disk glass substrate, comprising:
a step of polishing main surfaces on both sides of a glass substrate by pressing polishing pads against the main surfaces and moving the main surfaces and the polishing pads relative to each other while supplying a polishing slurry containing colloidal silica as polishing abrasive particles between the glass substrate and the polishing pads; and
a step of producing the polishing slurry that contains dissolved silica whose amount is reduced by, before the main surfaces are polished, adjusting an original polishing slurry that serves as a basis of the polishing slurry to be used in the polishing processing to an acid state and removing, through filter processing, a silica deposit from the original polishing slurry generated by adjusting the original polishing slurry to the acid state, the original polishing slurry being an alkaline slurry and containing the colloidal silica that is obtained by heating active silicic acid obtained by ion exchanging an aqueous solution of sodium silicate with a cation exchange resin.

2. The method for manufacturing a magnetic-disk glass substrate according to claim 1, wherein
an original polishing slurry after adjustment to the acid state has a pH of 1 to 5.

3. The method for manufacturing a magnetic-disk glass substrate according to claim 1 or 2, wherein
a concentration of dissolved silica in the polishing slurry is not more than 0.02 mass%.

4. The method for manufacturing a magnetic-disk glass substrate according

to any one of claims 1 to 3, wherein
the polishing slurry, after being used to polish the main surfaces of the glass substrate, is collected and used to polish main surfaces of another glass substrate.

5. The method for manufacturing a magnetic-disk glass substrate according to any one of claims 1 to 4, wherein
the colloidal silica has an average particle diameter of 10 to 100 nm.

6. The method for manufacturing a magnetic-disk glass substrate according to any one of claims 1 to 5, wherein
the filter processing includes filtering with a depth-type filter and filtering with a cation-type filter after the filtration with the depth-type filter.

7. A method for manufacturing a magnetic disk comprising:
a step of polishing main surfaces on both sides of a glass substrate by pressing polishing pads against the main surfaces and moving the main surfaces and the polishing pads relative to each other while supplying a polishing slurry containing colloidal silica as polishing abrasive particles between the glass substrate and the polishing pads;
a step of producing the polishing slurry that contains dissolved silica whose amount is reduced by, before the main surfaces are polished, adjusting an original polishing slurry that serves as a basis of the polishing slurry to be used in the polishing processing to an acid state and removing, through filter processing, a silica deposit from the original polishing slurry generated by adjusting the original polishing slurry to the acid state, the original polishing slurry being an alkaline slurry and containing the colloidal silica that is obtained by heating active silicic acid obtained by ion exchanging an aqueous solution of sodium silicate with a cation exchange resin; and

a step of forming a magnetic layer on each surface of the polished main surfaces.