CLAIMS

1. A method for manufacturing a glass substrate, comprising polishing processing for mirror-polishing main surfaces of a glass substrate, wherein:

the main surfaces of the glass substrate are mirror-polished using a polishing liquid containing polishing abrasive particles consisting of organic-based particles, the organic-based particles being made of an organic material which has a lower hardness than that of the glass substrate and has elasticity.

2. The method for manufacturing a glass substrate according to claim 1, wherein the organic-based particles are made of a styrene-based resin, an acryl-based resin, or a urethane-based resin.

3. The method for manufacturing a glass substrate according to claim 1 or 2, wherein a particle diameter of the organic-based particles is in a range of 0.5 to 60 μm.

4. The method for manufacturing a glass substrate according to any of claims 1 to 3, wherein, after the main surfaces of the glass substrate are polished using a polishing liquid containing silica abrasive particles as polishing abrasive particles, the main surfaces of the glass substrate are mirror-polished using the polishing liquid containing the organic-based particles as polishing abrasive particles.

5. The method for manufacturing a glass substrate according to any of claims 1 to 4, wherein, with regard to roughnesses of the main surfaces of the glass substrate before the main surfaces of the glass substrate are mirror-polished using the polishing liquid containing the polishing abrasive particles consisting of the organic-based particles, an arithmetic mean roughness Ra is 0.3 nm or less.

6. The method for manufacturing a glass substrate according to any of claims 1 to 5, wherein, after the main surfaces of the glass substrate are mirror-polished using the polishing liquid containing the polishing abrasive particles consisting of the organic-based particles, the glass substrate is cleaned using an alcohol-based cleaning agent.

7. The method for manufacturing a glass substrate according to any of claims 1 to 6, wherein the glass substrate is a magnetic-disk glass substrate.

8. The method for manufacturing a glass substrate according to any of claims 1 to 6, wherein the glass substrate is a glass substrate for a mask blank.

9. A method for manufacturing a magnetic disk, comprising

polishing processing for mirror-polishing main surfaces of a glass substrate according to any of claims 1 to 6; and

forming at least a magnetic layer on the glass substrate.

10. A polishing liquid composition for a glass substrate, which is to be applied in polishing processing for polishing surfaces of a glass substrate,

the polishing liquid composition comprising polishing abrasive particles consisting of organic-based particles in a polishing liquid, the organic-based particles being made of an organic material which has a lower hardness than that of the glass substrate and has elasticity.

11. The polishing liquid composition for a glass substrate according to claim 10, wherein a particle diameter of the organic-based particles is in a range of 0.5 to 60 μm.