

CLAIMS

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

5 after the main surfaces of the glass substrate are mirror-polished using a polishing liquid containing polishing abrasive particles consisting of organic-based particles, the glass substrate is cleaned using an organic-based cleaning agent, the organic-based particles being made of an elastic organic material which has a lower hardness than that of the glass substrate.

10 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 acrylic resin, or a urethane-based resin.

15 3. The method for manufacturing a glass substrate according to claim 1 or 2, wherein

the organic-based cleaning agent is an organic solvent or an amine compound.

4. A method for manufacturing a glass substrate, comprising processing for polishing main surfaces of a glass substrate, wherein

20 after the main surfaces of the glass substrate are subjected to polishing processing using a polishing liquid containing polishing abrasive particles consisting of elastic organic-based particles, processing for bringing an organic solvent that can swell the organic-based particles or a portion of the organic-based particles attached to surfaces of the glass substrate into contact
25 with the surfaces of the glass substrate is performed, the organic-based particles being made of an elastic organic material which has a lower hardness than that of the glass substrate.

5. The method for manufacturing a glass substrate according to claim

4, wherein

processing is performed in which when a solubility parameter (a SP value) of a monomer component of a resin that constitutes the organic-based particles is given as SP1 and a solubility parameter (a SP value) of the organic solvent is given as SP2, an organic solvent is selected such that SP2/SP1 is in a range of 0.9 to 1.1, and the selected organic solvent is brought into contact with the surfaces of the glass substrate.

6. The method for manufacturing a glass substrate according to claim 5, wherein

processing is performed in which when a molecular weight of the monomer component of the resin that constitutes the organic-based particles is given as MW1 and a molecular weight of the organic solvent is given as MW2, an organic solvent is selected such that MW2/MW1 is 1.5 or less, and the selected organic solvent is brought into contact with the surfaces of the glass substrate.

7. A method for manufacturing a glass substrate, comprising processing for polishing main surfaces of a glass substrate, wherein after the main surfaces of the glass substrate are subjected to polishing processing using a polishing liquid containing organic-based particles as polishing abrasive particles,

processing for bringing an organic solvent that can swell the organic-based particles or a portion of the organic-based particles attached to surfaces of the glass substrate into contact with the surfaces of the glass substrate is performed,

wherein the processing is performed in which when a solubility parameter (a SP value) of a monomer component of a resin that constitutes the organic-based particles is given as SP1 and a solubility parameter (a SP value) of the organic solvent is given as SP2, an organic solvent is selected such that SP2/SP1 is in a

range of 0.9 to 1.1, and the selected organic solvent is brought into contact with the surfaces of the glass substrate.

8. A method for manufacturing a glass substrate, comprising processing for polishing main surfaces of a glass substrate, wherein after the
5 main surfaces of the glass substrate are subjected to polishing processing using a polishing liquid containing organic-based particles as polishing abrasive particles,
processing for bringing an organic solvent that can swell the organic-based particles or a portion of the organic-based particles attached to surfaces of the
10 glass substrate into contact with the surfaces of the glass substrate is performed,
wherein the processing is performed in which when a molecular weight of the monomer component of the resin that constitutes the organic-based particles is given as MW1 and a molecular weight of the organic solvent is given as MW2,
15 an organic solvent is selected such that $MW2/MW1$ is 1.5 or less, and the selected organic solvent is brought into contact with the surfaces of the glass substrate.

9. The method for manufacturing a glass substrate according to claim 8, wherein
20 processing is performed in which when a solubility parameter (a SP value) of a monomer component of a resin that constitutes the organic-based particles is given as SP1 and a solubility parameter (a SP value) of the organic solvent is given as SP2, an organic solvent is selected such that $SP2/SP1$ is in a range of 0.9 to 1.1, and the selected organic solvent is brought into contact with
25 the surfaces of the glass substrate.

10. The method for manufacturing a glass substrate according to any of claims 1 to 9, 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.

11. The method for manufacturing a glass substrate according to
5 any of claims 1 to 10, wherein with regard to roughnesses of the main surfaces of the glass substrate before mirror-polishing is performed using the polishing liquid containing the organic-based particles as polishing abrasive particles, an arithmetic average roughness Ra is 0.3 nm or less.

12. The method for manufacturing a glass substrate according to
10 any of claims 1 to 11, wherein a particle diameter of the organic-based particles is in a range of 0.5 to 60 μm .

13. The method for manufacturing a glass substrate according to any of claims 1 to 12, wherein the glass substrate is a magnetic-disk glass substrate.

14. A method for manufacturing a magnetic disk, comprising
15 manufacturing a glass substrate with the method according to any of claims 1 to 12, and
at least a magnetic layer on the manufactured glass substrate.