CLAIMS

1. A method for polishing a glass substrate, by which a surface of a glass substrate is subjected to polishing processing using a polishing liquid containing cerium oxide as polishing abrasive particles,

wherein the polishing liquid is alkaline and contains an inorganic reducing agent, excluding sulfites, which reduces cerium (tetravalent) to trivalent cerium.

2. A method for polishing a glass substrate, by which a surface of a glass substrate is subjected to polishing processing using a polishing liquid containing cerium oxide as polishing abrasive particles,

wherein the polishing liquid is alkaline and contains at least one selected from thiosulfates, phosphinates, and dithionites with alkali metals or alkaline earth metals.

3. The method for polishing a glass substrate according to claim 1,

wherein the inorganic reducing agent is at least one selected from thiosulfates, phosphinates, and dithionites with alkali metals or alkaline earth metals.

4. The method for polishing a glass substrate according to claim 1 or 3,

wherein the content of the inorganic reducing agent is in a range of 0.5 wt% to 10 wt%.

5. The method for polishing a glass substrate according to claim 2,

wherein the content of the at least one selected from thiosulfates, phosphinates, and dithionites with alkali metals or alkaline earth metals is in a range of 0.5 wt% to 10 wt%.

6. The method for polishing a glass substrate according to any of claims 1 to 5,

wherein a pH of the polishing liquid is in a range of 8 to 12.

7. The method for polishing a glass substrate according to any of claims 1 to 6,

wherein the cerium oxide abrasive particles contain lanthanum (La).

8. A method for manufacturing a glass substrate, comprising:

polishing processing to which the method for polishing a glass substrate according to any of claims 1 to 7 is applied.

9. A method for manufacturing a magnetic-disk glass substrate, to which the method for manufacturing a glass substrate according to claim 8 is applied,

wherein the glass substrate is a magnetic-disk glass substrate.

10. A method for manufacturing a magnetic disk,

wherein at least a magnetic film is formed on a magnetic-disk glass substrate manufactured using the method for manufacturing a magnetic-disk glass substrate according to claim 9.

11. A polishing liquid that is to be used in processing for polishing a surface of a glass substrate,

wherein the polishing liquid is alkaline, contains cerium oxide as polishing abrasive particles, and further contains an inorganic reducing agent, excluding sulfates, which reduces cerium (tetravalent) to trivalent cerium.

12. A polishing liquid that is to be used in processing for polishing a surface of a glass substrate,

wherein the polishing liquid is alkaline, contains cerium oxide as polishing abrasive particles, and further contains at least one selected from thiosulfates, phosphinates, and dithionites with alkali metals or alkaline earth metals.

13. The polishing liquid according to claim 11,

wherein the inorganic reducing agent is at least one selected from thiosulfates, phosphinates, and dithionites with alkali metals or alkaline earth metals.

14. The polishing liquid according to claim 11 or 13,

wherein the content of the inorganic reducing agent is in a range of 0.5 wt% to 10 wt%.

15. The polishing liquid according to claim 12,

wherein the content of the at least one selected from thiosulfates, phosphinates, and dithionites with alkali metals or alkaline earth metals is in a range of 0.5 wt% to 10 wt%.