

CLAIMS

1. A method for manufacturing a glass substrate for an information recording medium using a polishing device in which a polishing pad composed
5 of a member containing a plurality of foam cells is mounted on a surface plate, and a surface of a glass substrate is polished using the polishing pad, the method comprising the steps of:

placing the glass substrate on the surface plate;

polishing the surface of the glass substrate using the polishing device

10 while supplying a liquid polishing agent to the glass substrate; and

removing the polished glass substrate from the surface plate,

wherein in a state in which the liquid polishing agent is supplied to the polishing pad, an attraction force of at least a lower-side polishing pad of the
polishing pad on the glass substrate is not less than 0.50 g/cm^2 and not more
15 than 15 g/cm^2 .

2. A method for manufacturing a glass substrate for an information recording medium using a polishing device in which a polishing pad composed of a member containing a plurality of foam cells is mounted on a surface plate, and a surface of a glass substrate is polished using the polishing pad, the method comprising the steps of:

placing the glass substrate on the surface plate;

polishing the surface of the glass substrate using the polishing device

while supplying a liquid polishing agent to the glass substrate; and

25 removing the polished glass substrate from the surface plate, wherein

at least a lower-side polishing pad of the polishing pad has an open-cell structure in which a plurality of communication holes that allow adjacent foam cells of the foam cells to communicate with each other are formed,

in a section of the lower-side polishing pad taken in a direction of a
30 normal to the surface plate, the communication holes having a cross-sectional area of 0.01 mm^2 or more are present at a density of 30 or more communication

holes per 25 mm², and

in a state in which the liquid polishing agent is supplied to the polishing pad, an attraction force of the lower-side polishing pad on the glass substrate is not less than 0.50 g/cm² and not more than 15 g/cm².

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~~23. The method for manufacturing a glass substrate for an information recording medium according to claim 1,~~

wherein A method for manufacturing a glass substrate for an information recording medium using a polishing device in which a polishing pad composed of a member containing a plurality of foam cells is mounted on a surface plate, and a surface of a glass substrate is polished using the polishing pad, the method comprising the steps of:

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placing the glass substrate on the surface plate;

polishing the surface of the glass substrate using the polishing device

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while supplying a liquid polishing agent to the glass substrate; and

removing the polished glass substrate from the surface plate, wherein

at least a lower-side polishing pad of the polishing pad has an open-cell structure in which a plurality of communication holes that allow adjacent foam cells of the foam cells to communicate with each other are formed, and

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in a vertical-section of the lower-side polishing pad taken in a direction of a normal to the surface plate, the communication holes having a cross-sectional area of 0.01 mm² or more are present at a density of 30 or more communication holes per 25 mm² of the vertical-section.

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~~34. The method for manufacturing a glass substrate for an information recording medium according to claim 2 or 3,~~

wherein in the vertical-section of the lower-side polishing pad taken in the direction of the normal to the surface plate, the communication holes having a cross-sectional area of 0.01 mm² or more are present at a density of 80 or more communication holes per 25 mm² of the vertical-section.

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45. The method for manufacturing a glass substrate for an information recording medium according to any one of claims 1 to 3,

wherein in the step of removing the polished glass substrate from the surface plate, the polished glass substrate is removed from the surface plate in a state in which the polishing pad still contains the liquid polishing agent.

56. The method for manufacturing a glass substrate for an information recording medium according to claim 45,

wherein in the step of removing the polished glass substrate from the surface plate by adding a new slurry, the liquid polishing agent has a concentration that is 1.5-fold or more when compared with a concentration of the liquid polishing agent in the step of polishing the surface of the glass substrate using the polishing device.

7. A method for manufacturing an information recording medium, characterized in that at least a magnetic film is formed on a surface of a glass substrate for an information recording medium obtained in accordance with the method for manufacturing a glass substrate for an information recording medium as recited in any one of claims 1 to 6.

8. A polishing pad mounted on a surface plate of a polishing device and used for a polishing process, characterized in that

the polishing pad has a plurality of foam cells and a plurality of communication holes that allow adjacent foam cells of the foam cells to communicate with each other, and

in a section of the polishing pad taken in a direction normal to the surface plate, the communication holes having a cross-sectional area of 0.01 mm² or more are present at a density of 30 or more communication holes per 25 mm² of the section.