CLAIMS

1. A method for manufacturing a magnetic-disk glass substrate comprising edge surface grinding processing performed using a rotating grindstone on an edge surface of a disk-shaped glass substrate in the center of which a circular hole is formed, the edge surface having a side wall surface and chamfered surfaces each formed between the side wall surface and a main surface,

wherein in the edge surface grinding processing, a pair of chamfered surfaces of the glass substrate are simultaneously ground with a rotation axis of the grindstone inclined with respect to an axis orthogonal to the main surface of the substrate,

the grindstone has a groove shape having a pair of chamfered surface grinding areas for grinding the chamfered surfaces of the glass substrate,

the pair of chamfered surface grinding areas include:

a first chamfered surface grinding area ~~(A)~~ that comes into contact with the chamfered surface of the glass substrate on a front side in a rotation direction of the grindstone, with reference to a contact point between the glass substrate and the grindstone that is located on a straight line connecting the center of the glass substrate and a rotation axis of the grindstone; and

a second chamfered surface grinding area ~~(B)~~ that comes into contact with

the chamfered surface of the glass substrate on a rear side in a rotation direction of the grindstone, and

an opening angle of the first chamfered surface grinding area ~~(A)~~ is smaller than an opening angle of the second chamfered surface grinding area ~~(B)~~.

2. The method for manufacturing a magnetic-disk glass substrate according to claim 1,

wherein the groove shape of the grindstone further has a side wall surface grinding area for grinding the side wall surface of the glass substrate, and

in the edge surface grinding processing, the side wall surface and the pair of chamfered surfaces of the glass substrate are simultaneously ground.

3. The method for manufacturing a magnetic-disk glass substrate according to claim 1 or 2,

wherein the magnetic-disk glass substrate has a thickness of less than 0.635 mm.

4. The method for manufacturing a magnetic-disk glass substrate according to any of claims 1 to 3,

wherein the magnetic-disk glass substrate is made of crystallized glass.

5. A method for manufacturing a magnetic disk comprising processing for forming a magnetic layer on the main surface of the magnetic-disk glass substrate produced with the method for manufacturing a magnetic-disk glass substrate according to any of claims 1 to 4.

6. A grindstone to be rotated and used in edge surface grinding processing performed on an edge surface of a disk-shaped glass substrate in the center of which a circular hole is formed, the edge surface having a side wall surface and chamfered surfaces each formed between the side wall surface and a main surface,

wherein the grindstone is constituted by a cylindrical or columnar rotation body and is provided with a groove on a circumference of the rotation body,

the groove includes a side wall surface grinding surface that comes into contact with the side wall surface of the glass substrate, a first chamfered surface grinding surface ~~(A)~~ that comes into contact with one of the chamfered surfaces between which the side wall surface is interposed, and a second chamfered surface grinding surface ~~(B)~~ that comes into contact with the other of the chamfered surfaces in a cross-sectional view taken along a plane including a rotation axis of the rotation body, ~~and~~

opening angles of the first chamfered surface grinding surface ~~(A)~~ and the second chamfered surface grinding surface ~~(B)~~ with respect to the side wall surface grinding surface are different from each other~~.~~, and

the grindstone is used to grind the chamfered surfaces of the disk-shaped glass substrate simultaneously while a rotation axis of the grindstone is inclined with respect to an axis orthogonal to the main surface of the substrate.