CLAIMS

1. An annular spacer to be disposed such that a main surface of the spacer is in contact with a magnetic disk such that the plural magnetic disks are kept spaced apart from each other by a pressing force of a clamp in a hard disk drive device,

wherein a material of the spacer contains glass,

wherein the spacer comprises~~ing~~:

a pair of ~~two~~ main surfaces~~;~~,

~~——~~an inner circumferential surface, ~~;~~ and

~~——~~an outer circumferential surface,

wherein a chamfered surface is present between the outer circumferential surface and each of the pair of~~two~~ main surfaces, and

at least a portion of the~~an~~ outer circumferential region of at least one of the pair of ~~two~~ main surfaces includes an inclined region that is inclined toward the other main surface side in a radial direction from a center of the spacer to the outer circumferential surface side, the inclined region offsets the recess in one of the main surfaces formed by the pressing force of the clamp.

2. An annular spacer to be disposed such that a main surface of the spacer is in contact with a magnetic disk such that the plural magnetic disks are kept spaced apart from each other by a pressing force of a clamp in a hard disk drive device,

wherein a material of the spacer contains glass,

wherein the spacer comprises:

a pair of main surfaces, an inner circumferential surface, and an outer circumferential surface,

wherein a chamfered surface is present between the outer circumferential surface and each of the pair of main surfaces, and

at least a portion of the outer circumferential region of at least one of the pair of main surfaces includes an inclined region that is inclined toward the other main surface side in a radial direction from a center of the spacer to the outer circumferential surface side, the inclined region is provided such that the amount of change in flatness of the main surfaces of the magnetic disk closest to the clamping member is 4 μm or less before and after clamping by the clamping member.

3~~2~~. The spacer according to claim 1 or 2,

wherein a drop amount of the inclined region that is inclined toward the other main surface side is 0.1 to 2 μm.

4~~3~~. The spacer according to any one of claims 1 to~~or~~ 3~~2~~,

wherein the inclined region is a curved surface that protrudes in a direction from the inside to the outside of the spacer.

~~4. The spacer according to any one of claims 1 to 3,~~

~~wherein the thickness of the magnetic disk is 80% or less of the thickness of the spacer.~~

5. The spacer according to any one of claims 1 to 4,

wherein the Young's modulus of the spacer is smaller than the Young's modulus of a substrate that constitutes the magnetic disk.

~~6. The spacer according to any one of claims 1 to 5,~~

~~wherein a material of the spacer contains glass.~~

6~~7~~. The spacer according to any one of claims 1 to 5~~6~~, further comprising a conductive film on a surface of the spacer.

78. The spacer according to any one of claims 1 to 67, wherein the magnetic disk has a thickness of 0.55 mm or less.

89. A hard disk drive device comprising the spacer according to any one of claims 1 to 78.

910. The hard disk drive device according to claim 89, comprising ten or more magnetic disks.

101. The hard disk drive device according to claim 89 or 910, wherein a substrate for the magnetic disks is made of glass.