What is Claimed

[Claim 1] A quartz glass crucible comprising:

a crucible body made of silica glass; and

a crystallization-accelerator-containing layer formed on an outer surface of the crucible body, wherein

the crucible body has a cylindrical side wall portion, a bottom portion, and a corner portion between the side wall portion and the bottom portion,

the crystallization-accelerator-containing layer is formed at least on the side wall portion,

a concentration of a crystallization accelerator contained in the crystallization-accelerator-containing layer is 1.0×10^{13} atoms/cm^2 or more and 4.8×10^{15} atoms/cm^2 or less, and

the concentration of the crystallization accelerator on the side wall portion is gradually reduced toward an upper end of the side wall portion from a lower end thereof.

[Claim 2] The quartz glass crucible according to claim 1, wherein a thickness of a crystal layer formed on the outer surface when the crucible is heated for 25 hours at a temperature of 1550°C or higher and 1600°C or lower is 200 μm or more and 500 μm or less.

[Claim 3] The quartz glass crucible according to claim 1, wherein the crystallization-accelerator-containing layer is formed both on the side wall portion and the corner portion.

[Claim 4] The quartz glass crucible according to claim 3, wherein the crystallization-accelerator-containing layer is not formed on the bottom portion.

[Claim 5] The quartz glass crucible according any one of claims 1 to 4, wherein the crystallization-accelerator-containing layer is formed only on the outer surface of the crucible body and not on an inner surface of the crucible body.