CLAIMS

1. A CZ crucible for growing a single crystal silicon ingot by a CZ method, wherein

the CZ crucible comprises a closed-end cylindrical graphite crucible and a closed-end cylindrical quartz glass crucible disposed inside the graphite crucible, and

the CZ crucible includes a gap between an inner surface of a bottom portion of the graphite crucible and an outer surface of a bottom portion of the quartz glass crucible on a central axis of the CZ crucible, the gap keeping the inner surface of the bottom portion of the graphite crucible and the outer surface of the bottom portion of the quartz glass crucible contactless with each other, the quartz glass crucible comprises a cylindrical straight body portion, a first curved portion continuous with a lower end of the cylindrical straight body portion and having a first curvature radius R1, a second curved portion continuous with the first curved portion and having a second curvature radius R2, and a bottom portion continuous with the second curved portion,

the first curvature radius R1 and the second curvature radius R2 have a relationship of $R1 < R2$, and

an outer surface of the bottom portion has a flat surface shape perpendicular to a central axis of the quartz glass crucible.

2. The CZ crucible according to claim 1, wherein a height of the gap in a direction of the central axis on the central axis of the CZ crucible is 0.5 mm to 5.0 mm.

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3. The CZ crucible according to claim 1 or 2, wherein a size of the gap in a direction perpendicular to the central axis of the CZ crucible is 60 mm or more in diameter.

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