CLAIMS

1. A sputtering target comprising

a molybdenum content of from 3 to 25 mol% and

a silicon content of from 75 to 97 mol%, wherein:

the sputtering target includes a silicon phase in which an average grain size of silicon grains is 2.0 μm or less, and a molybdenum silicide phase in which an average grain size of molybdenum silicide grains is 2.5 μm or less; and

an average number of holes present at a magnification of 5000x in the silicon phase and having a major axis of 0.3 μm or greater is ten or fewer within an area of 90×125 μm, and wherein the sputtering target has a relative density of 100% or more.

2. The sputtering target according to claim 1, wherein the number of aggregates created by aggregation of the molybdenum silicide grains and having a circle-equivalent diameter of 10 μm or greater is one or fewer per 1 mm^2.

3. A production method for producing the sputtering target according to any one of claims 1 or 2, the method comprising steps of:

mixing a molybdenum powder and a silicon powder;

subjecting the obtained powder mixture to a spark plasma sintering process; and then

subjecting the powder mixture to a hot isostatic pressing process, wherein,

in the step of subjecting the powder mixture to the hot isostatic pressing process, the sintering temperature is from 1150°C to 1350°C.

4. The production method according to claim 3, wherein, in the step of subjecting the powder mixture to the spark plasma sintering process, the sintering temperature is from 1100°C to 1200°C.