

METHOD FOR PRODUCING FINE SILICON POWDER, AND METHOD FOR
PRODUCING FINE SILICON NITRIDE POWDER

ABSTRACT OF THE DISCLOSURE

A method for producing fine silicon powder and a method for producing fine silicon nitride powder each include the steps of: slicing a silicon ingot 3 fixed to a fixing plate 4 containing aluminum hydroxide with a fixed abrasive grain wire saw 2; recovering a slurry including silicon cutting waste, impurities, and a coolant liquid; separating the recovered slurry into solid and liquid to extract a cake 18 including the silicon cutting waste and the impurities; and washing the cake 18 by immersing and stirring the cake 18 for 20 minutes to 60 minutes with a sulfuric acid aqueous solution containing 1 weight % to 40 weight % of sulfuric acid that has been heated to 50°C to 90°C.

FIG. 1