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(54) **PROCESSES FOR PRODUCTION OF SLURRIES AND MOLDS FOR PRECISION CASTING**

(57) A manufacturing method for a slurry for the production of a precision casting mold that includes a zirconia sol and a refractory powder, and a manufacturing method for a precision casting mold that uses the slurry is provided. The present invention relates to a manufacturing method for a slurry for the production of a precision casting mold for a metal that includes a step in which an alkaline zirconia sol (A1) and a refractory powder (D) are mixed, the alkaline zirconia sol (A1) being obtained by a manufacturing method that includes a step (i), in which a zirconium salt (B1) is heated at 60 to 110°C in an aqueous medium that includes a carbonate of quaternary am-

monium, and a step (ii), in which a hydrothermal treatment is carried out at 100 to 250°C. In addition, the present invention relates to a manufacturing method for a slurry for the production of a precision casting mold for a metal that includes a step in which an acidic zirconia sol (C3) and a refractory powder (D) are mixed, the acidic zirconia sol (C3) being obtained by a manufacturing method that includes a step (I), in which an alkaline zirconia sol (A3) and a zirconium salt (B3) are mixed, and a step II, in which the obtained liquid mixture is caused to react at 80 to 250°C.

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