

CR-SI SINTERED BODY, SPUTTERING TARGET, AND METHOD FOR PRODUCING THIN FILM

ABSTRACT

5 A Cr-Si sintered body contains Cr and Si. The Cr-Si sintered
body contains a crystalline CrSi_2 phase and a crystalline Si phase. A
content of the Si phase in the Cr-Si sintered body is 40% by mass or more.
A relative density of the Cr-Si sintered body relative to a true density of
the Cr-Si sintered body is 95% or more. The CrSi_2 phase has an average
10 crystal grain size of 40 μm or less, and the Si phase has an average crystal
grain size of 30 μm or less. A total content of impurities in the Cr-Si
sintered body is 200 ppm by mass or less, and the impurities are
composed of at least one element selected from the group consisting of
Mn, Fe, Mg, Ca, Sr, and Ba.

15 [No available figure]