

ABSTRACT

SINTERED COMPACT MAGNESIUM OXIDE TARGET FOR SPUTTERING, AND METHOD
FOR PRODUCING SAME

A sintered compact magnesium oxide target for sputtering having a purity of
5 99.99 wt% or higher excluding C, a density of 3.57 g/cm^3 or higher, and a whiteness of
60% or less. In order to uniformly deposit a magnesium oxide film, a magnesium
oxide target having a higher purity and a higher density is being demanded. An object
of this invention is to provide a target capable of realizing the above, and a method for
producing such a target. While a magnesium oxide sintered compact sputtering target
10 is produced by hot-pressing a raw material powder, there is a problem in that color
shading occurs in roughly $\phi 60$ (within a circle having a diameter of 60 mm) at the
center part of the target. Conventionally, no particularly attention was given to this
problem. However, in recent years, it has become necessary to investigate and
resolve this problem in order to improve the deposition quality.

15 Fig. 1