

## ABSTRACT

### SINTERED SPUTTERING TARGET MADE OF REFRACTORY METALS

Proposed is a sintered sputtering target containing two or more types of refractory metals. In particular, proposed is a sintered sputtering target of refractory metals that is able to improve the target structure to prevent the dropout of metal particles other than the matrix-forming major component, improve the deposition quality as well as the workability of the target by reducing impurities such as gas components, enhancing the density and eliminating the generation of arcing and particles in sputtering. This sintered sputtering target of refractory metals is composed of one or more types of minor components selected from W, Ta and Hf at less than 50at% as well as at least one or more major components selected from Ru, Rh and Ir and inevitable impurities as the remainder. The metal structure of the major component comprises a granular minor component metal phase, or an alloy phase or a compound phase of the major and the minor component having an average grain size of  $100\mu\text{m}$  to  $500\mu\text{m}$ .