

ABSTRACT OF THE DISCLOSURE**RE-BASED ALLOYS USABLE AS DEPOSITION TARGETS FOR
FORMING INTERLAYERS IN GRANULAR PERPENDICULAR MAGNETIC
RECORDING MEDIA & MEDIA UTILIZING SAID ALLOYS**

A Re-based alloy material comprises > 50 at. % Re and at least one alloying material selected from grain size refinement elements X which have an atomic radius larger or smaller than that of Re and a solid solubility < ~6 at. % in *hcp* Re at room or higher temperatures, and lattice matching elements Y which have an atomic radius larger or smaller than that of Re and form a solid solution in *hcp* Re at room or higher temperatures. The alloy material may further comprise at least one material selected from the group consisting of oxides, nitrides, and carbides. Targets comprising the Re-based alloy material are useful in sputter deposition of improved interlayers for obtaining optimally structured granular perpendicular magnetic recording layers.

(Figure 1)