CLAIMS

1. A Pt-oxide-based sputtering target consisting of 60 vol% or more and less than 100 vol% of a Pt-base alloy phase and more than 0 vol% and 40 vol% or less of an oxide, wherein the Pt-base alloy phase contains 50 at% or more and less than 100 at% of Pt, and wherein the Pt-base alloy phase further contains, in total, more than 0 at% and 50 at% or less of one or more selected from Si, Ti, Cr, B, V, Nb, Ta, Ru, Mn, Zn, Mo, W, and Ge.

2. The Pt-oxide-based sputtering target according to Claim 1, wherein the oxide is one or more selected from B_2O_3, WO_3, Nb_2O_5, SiO_2, Ta_2O_5, TiO_2, Al_2O_3, Y_2O_3, Cr_2O_3, ZrO_2, and HfO_2.

3. A perpendicular magnetic recording medium comprising: a CoPt-base alloy-oxide granular magnetic layer containing Co-rich grains; and a Pt-base alloy-oxide thin layer containing Pt-rich grains and being stacked under the CoPt-base alloy-oxide granular magnetic layer, wherein:
the CoPt-base alloy-oxide granular magnetic layer consists of 60 vol% or more and less than 100 vol% of a CoPt-base alloy phase and more than 0 vol% and 40 vol% or less of an oxide;
the CoPt-base alloy phase of the CoPt-base alloy-oxide granular magnetic layer contains 60 at% or more and 85 at% or less of Co and 15 at% or more and 40 at% or less of Pt;
the Pt-base alloy-oxide thin layer has a thickness of more than 0 nm and 2 nm or less and consists of 60 vol% or more and less than 100 vol% of a Pt-base alloy phase and more than 0 vol% and 40 vol% or less of an oxide; and
the Pt-base alloy phase of the Pt-base alloy-oxide thin layer contains 50 at% or more and less than 100 at% of Pt, and
wherein the Pt-base alloy phase of the Pt-base alloy-oxide thin layer further contains, in total, more than 0 at% and 50 at% or less of one or more selected from Si, Ti, Cr, B, V, Nb, Ta, Ru, Mn, Zn, Mo, W, and Ge.

4. A perpendicular magnetic recording medium comprising: a CoPt-base alloy-oxide granular magnetic layer containing Co-rich grains; and a Pt-base alloy-oxide thin layer containing Pt-rich grains and being stacked on the CoPt-base alloy-oxide granular magnetic layer, wherein:
the CoPt-base alloy-oxide granular magnetic layer consists of 60 vol% or more and less than 100 vol% of a CoPt-base alloy phase and more than 0 vol% and 40 vol% or less of an oxide; the CoPt-base alloy phase of the CoPt-base alloy-oxide granular magnetic layer contains 60 at% or more and 85 at% or less of Co and 15 at% or more and 40 at% or less of Pt;
the Pt-base alloy-oxide thin layer has a thickness of more than 0 nm and 4 nm or less and consists of 60 vol% or more and less than 100 vol% of a Pt-base alloy phase and more than 0 vol% and 40 vol% or less of an oxide; and
the Pt-base alloy phase of the Pt-base alloy-oxide thin layer contains 50 at% or more and 100 at% or

less of Pt and
wherein the Pt-base alloy phase of the Pt-base alloy-oxide thin layer further contains, in total, more than 0 at% and 50 at% or less of one or more selected from Si, Ti, Cr, B, V, Nb, Ta, Ru, Mn, Zn, Mo, W, and Ge.

5. A perpendicular magnetic recording medium comprising a plurality of combinations, each of which comprises: a CoPt-base alloy-oxide granular magnetic layer containing Co-rich grains; and a Pt-base alloy-oxide thin layer containing Pt-rich grains and being stacked on the CoPt-base alloy-oxide granular magnetic layer, wherein:
the CoPt-base alloy-oxide granular magnetic layer consists of 60 vol% or more and less than 100 vol% of a CoPt-base alloy phase and more than 0 vol% and 40 vol% or less of an oxide;
the CoPt-base alloy phase of the CoPt-base alloy-oxide granular magnetic layer contains 60 at% or more and 85 at% or less of Co and 15 at% or more and 40 at% or less of Pt;
the Pt-base alloy-oxide thin layer consists of 60 vol% or more and less than 100 vol% of a Pt-base alloy phase and more than 0 vol% and 40 vol% or less of an oxide;
the Pt-base alloy phase of the Pt-base alloy-oxide thin layer contains 50 at% or more and less than 100 at% or less of Pt, and further contains, in total, more than 0 at% and 50 at% or less of one or more selected from Si, Ti, Cr, B, V, Nb, Ta, Ru, Mn, Zn, Mo, W, and Ge; and
a total thickness of the Pt-base alloy-oxide thin layers included in the perpendicular magnetic recording medium is more than 0 nm and 4 nm or less.

6. The perpendicular magnetic recording medium according to any one of Claims 3 to 5, wherein the Pt-base alloy-oxide thin layer contains, in total, 0 vol% or more and 40 vol% or less of one or more oxides selected from B_2O_3, WO_3, Nb_2O_5, SiO_2, Ta_2O_5, TiO_2, Al_2O_3, Y_2O_3, Cr_2O_3, ZrO_2, and HfO_2.