CLAIMS

1. A perpendicular magnetic recording medium comprising a non-magnetic substrate, a first magnetic recording layer, and a second magnetic recording layer which are formed in this order, wherein

the first magnetic recording layer has a granular structure that includes first magnetic crystal grains and a first non-magnetic crystal grain boundary that surrounds the first magnetic crystal grains, the first magnetic crystal grains contain an ordered alloy, and the first non-magnetic crystal grain boundary contains C, and

the second magnetic recording layer has a granular structure that includes second magnetic crystal grains and a second non-magnetic crystal grain boundary that surrounds the second magnetic crystal grains, the second magnetic crystal grains contain an ordered alloy, and the second non-magnetic crystal grain boundary consists of $Ge0_2$.

2. The perpendicular magnetic recording medium according to claim 1 wherein

at least one of the first and second magnetic crystal grains contains a $L1_0$-based ordered alloy.

3. The perpendicular magnetic recording medium according to claim 2, wherein

the $L1_0$-based ordered alloy contains Fe and Pt.

4. The perpendicular magnetic recording medium according to claim 3, wherein

the $L1_0$-based ordered alloy further contains at least one element selected from the group consisting of Ni, Mn, Cr, Cu, Ag, and Au.