CLAIMS

1. A magnetic recording medium comprising a non-magnetic substrate, a first seed layer, and a first magnetic recording layer formed on the first seed layer, wherein:

the first seed layer comprises Pt;

the first magnetic recording layer comprises one or more magnetic layers,

the magnetic layer in contact with the first seed layer comprises Fe, Pt and Ti;

the magnetic layer in contact with the first seed layer has a granular structure consisting of magnetic crystal grains of a $L1_0$ type ordered alloy comprising Fe and Pt, and a non-magnetic grain boundary comprising Ti; and

the magnetic layer in contact with the first seed layer comprises 4 at% or more and 12 at% or less of Ti, based on the total number of atoms.

2. A magnetic recording medium comprising a non-magnetic substrate, a first seed layer, and a first magnetic recording layer formed on the first seed layer, wherein:

the first seed layer comprises Pt;

the first magnetic recording layer comprises one or more magnetic layers,

the magnetic layer in contact with the first seed layer comprises Fe, Pt and Ti;

the magnetic layer in contact with the first seed layer has a granular structure consisting of magnetic crystal grains of a $L1_0$ type ordered alloy comprising Fe and Pt, and a non-magnetic grain boundary comprising Ti; and

the magnetic recording medium further comprises a second seed layer and a second magnetic recording layer between the non-magnetic substrate and the first seed layer, and the second magnetic recording layer is in contact with the first seed layer.

3. The magnetic recording medium according to Claim 1 or 2, wherein the $L1_0$ type ordered alloy further comprises at least one element selected from the group consisting of Ni, Mn, Ag, Au and Cr.

4. The magnetic recording medium according to Claim 1 or 2, wherein the first magnetic recording layer consists of one magnetic layer.

5. The magnetic recording medium according to Claim 1 or 2, further comprising one or more layers selected from the group consisting of a heat sink layer, an adhesive layer, a soft magnetic backing layer, and a base layer, between the non-magnetic substrate and the first seed layer.