

GRANULAR THIN FILM, PERPENDICULAR MAGNETIC RECORDING MEDIUM
EMPLOYING GRANULAR THIN FILM AND MAGNETIC RECORDING APPARATUS

ABSTRACT OF THE DISCLOSURE

A perpendicular magnetic recording medium suitable for attaining a low noise high magnetic recording density is obtained.

5 The medium has a small average magnetic grain diameter, a small magnetic grain diameter distribution, a high perpendicular crystallographic magnetic grain orientation and a high regularity magnetic grain arrangement. The perpendicular magnetic recording medium comprises a soft magnetic layer, a granular under-layer

10 and a perpendicular magnetic recording layer on a substrate. The granular under-layer is formed on a metal under-layer. The metal grains in the granular layer are separated by nonmagnetic inter-grain material and are partially penetrated into the metal under-layer. The perpendicular magnetic recording layer is

15 formed on the granular layer. Then a perpendicular magnetic recording medium shows high signal to noise ratio and excellent high-density recording characteristics.

Figure 1