METHOD OF MANUFACTURING MAGNETIC RECORDING MEDIUM

ABSTRACT

A method of manufacturing a magnetic recording medium by using an in-line sputtering apparatus (10) to successively form, on a substrate (1), at least one or more underlying layer (2), and a magnetic CoPt-based film (3), a nonmagnetic film (4), and a magnetic CoPt-based film (5). An underlying film (2c) and/or the nonmagnetic film (4), which are contacted with the magnetic film, are deposited with low sputtering power between 100 and 1000 watts to improve magnetic properties of the magnetic recording medium. Low power sputtering is also effective to improve a distribution of difference of the crystal lattice distances between the nonmagnetic intermediate film (4) and the magnetic film (3) and between the underlying layer (2) and the magnetic film (3).

Fig. 4.