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ABSTRACT

METHOD OF MANUFACTURING MAGNETIC RECORDING MEDIUM, MAGNETIC RECORDING MEDIUM, AND INFORMATION STORAGE DEVICE

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A manufacturing method of a magnetic recording medium includes: forming a magnetic film having an artificial lattice structure by laminating plural types of atomic layers alternately on a substrate; and separating dots, which forms a dot separation band by implanting an ion, to reduce saturation magnetization locally, into portions of the magnetic film other than plural portions of the magnetic film. Each of the plural portions is made into a magnetic dot in which information is to be magnetically recorded. The saturation magnetization of the dot separation band is smaller than that of the magnetic dot.

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20 Fig. 4