



ABSTRACT

METHOD OF MAGNETIC TRANSFER TO MAGNETIC RECORDING MEDIUM INCLUDING TWO RECORDING LAYERS AND THE MAGNETIC RECORDING MEDIUM

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A method of magnetic transfer, that facilitates transferring magnetic signals independently to two recording layers included in a magnetic recording medium.

The method includes setting the coercive force H_{c1} of an upper
10 recording layer 1a, the coercive force H_{c2} of a lower recording layer 1b below the upper recording layer 1a, the strength H_{ex2} of a first transfer magnetic field and the strength H_{ex1} of a second transfer magnetic field at the respective values such that the following relations hold: $H_{c1} \ll H_{c2}$, $H_{ex1} \ll H_{ex2}$, $H_{c1} \ll H_{ex2}$, and $H_{ex1} \ll H_{c2}$; applying the first transfer magnetic
15 field H_{ex2} to transfer magnetization patterns exclusively to the lower recording layer 1b and to uniformly magnetize the upper recording layer 1a; and applying the second transfer magnetic field H_{ex1} to transfer magnetization patterns exclusively to the upper recording layer 1a and to keep the magnetization patterns in the lower recording layer 1b unaffected
20 by the application of the second transfer magnetic field H_{ex1} . The magnetization patterns in a first master disk for the step of applying the first transfer magnetic field H_{ex2} and the magnetization patterns in a second master disk for the step of applying the second transfer magnetic field H_{ex1} are different from each other to record data in the upper
25 recording layer 1a and to record servo signals in the lower recording layer 1b such that the servo signals recorded in the lower recording layer 1b are not erased during recording data in the upper recording layer 1a.

[Selected Drawing]

Figs. 2(a) though 2(c)