

ABSTRACT OF THE DISCLOSURE (FIG. 3A)

"PERPENDICULAR MAGNETIC RECORDING HEAD AND
PERPENDICULAR MAGNETIC RECORDING APPARATUS"

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A perpendicular magnetic recording apparatus includes a perpendicular double-layer film medium including a stack of a soft magnetic backing layer and a perpendicular magnetic recording layer in which recording is performed under a condition that a recording track pitch as a total of a recording track width and a guard-band width between recording tracks is set to be 1 μm or less, and a perpendicular magnetic recording head including a recording main pole, an auxiliary pole disposed at a gap having a length of five or less times the guard-band width with respect to the recording main pole, and an exciting coil.

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