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(71) Applicants (for all designated States except US): **SHOWA DENKO K.K.** [JP/JP]; 13-9, Shiba Daimon 1-chome, Minato-ku, Tokyo 105-8518 (JP). **WASEDA UNIVERSITY** [JP/JP]; 104, Totsuka-cho 1-chome, Shinjuku-ku, Tokyo 169-0071 (JP).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **OHMORI**,

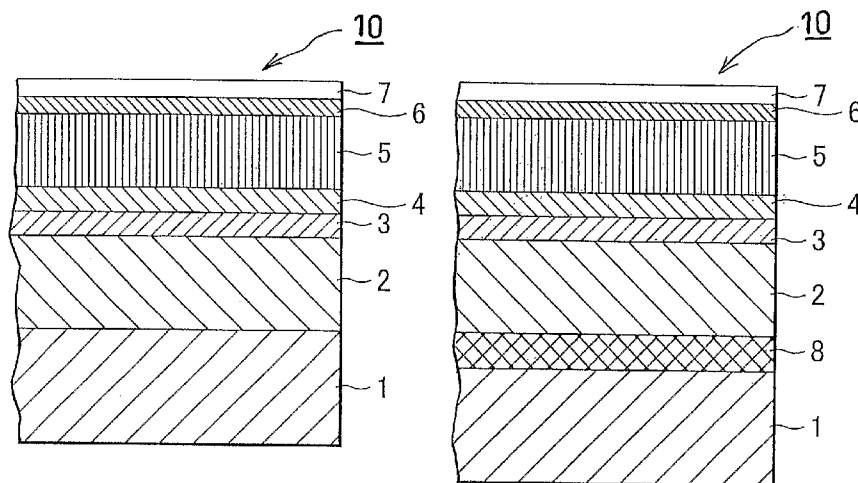
Masahiro [JP/JP]; c/o SHOWA DENKO K.K., 1-480, Inuzuka, Oyama-shi, Tochigi, 323-8678 (JP). **OHTA, Hiroshi** [JP/JP]; c/o SHOWA DENKO K.K., 1-480, Inuzuka, Oyama-shi, Tochigi, 323-8678 (JP). **OSAKA, Tetsuya** [JP/JP]; WASEDA UNIVERSITY, School of Science and Engineering, Dept. of Applied Chemistry, 3-4-1, Okubo, Shinjuku-ku, Tokyo, 169-8555 (JP). **ASAHI, Toru** [JP/JP]; WASEDA UNIVERSITY, Graduate School of Science and Engineering, Nano Science and Engineering, 3-4-1, Okubo, Shinjuku-ku, Tokyo, 169-8555 (JP). **YOKOSHIMA, Tokihiko** [JP/JP]; WASEDA UNIVERSITY, Advanced Research Institute for, Science and Engineering, 3-4-1, Okubo, Shinjuku-ku, Tokyo, 169-8555 (JP).

(74) Agents: **FUKUDA, Kenzo** et al.; Kashiwaya Bldg., 6-13, Nishishinbashi-chome, Minato-ku, Tokyo 105-0003 (JP).

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(54) Title: PERPENDICULAR MAGNETIC RECORDING MEDIUM, PRODUCTION PROCESS THEREOF, AND PERPENDICULAR MAGNETIC RECORDING AND REPRODUCING APPARATUS



(57) Abstract: The invention is directed to a perpendicular magnetic recording medium (10) including a non-magnetic substrate (1), and at least a soft magnetic undercoat film (2) formed of a soft magnetic material, an alignment-regulating film (3) for regulating the crystal alignment of a film provided directly thereon, a perpendicular magnetic film (5) in which easy-magnetization axes are oriented generally perpendicular to the substrate, and a protective layer (6), the films and the layer being provided atop the substrate, wherein the soft magnetic undercoat film exhibits magnetic isotropy or has easy-magnetization axes oriented perpendicular to the substrate. According to the present invention, an undercoat film (2) having no magnetic domain walls can be formed. When the undercoat film is employed, there can be provided a perpendicular magnetic recording medium and a perpendicular magnetic recording and reproducing apparatus which exhibit high thermal stability and excellent noise characteristics, and which attain high-density recording.

WO 2004/040557 A1



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