



- [54] **MAGNETOOPTIC LAYER AND A PROCESS FOR ITS FABRICATION**
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- [21] Appl. No.: **224,190**
- [22] Filed: **Apr. 7, 1994**

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Related U.S. Application Data

- [63] Continuation of Ser. No. 785,880, Nov. 4, 1991, abandoned, which is a continuation of Ser. No. 480,496, Feb. 16, 1990, abandoned.

Foreign Application Priority Data

- Feb. 16, 1989 [DE] Germany 39 04 611.7
- [51] Int. Cl.⁶ **G11B 5/66**; B32B 5/16; C23C 14/00
- [52] U.S. Cl. **428/332**; 428/336; 428/610; 428/684 ML; 428/684 SC; 428/684.6 R; 428/684 NF; 428/684 MM; 428/684 T; 428/684 RF; 428/684 XS; 428/900; 428/638; 204/192.1; 204/192.2; 204/192.26; 363/13
- [58] Field of Search 428/694 ML, 694 SC, 428/694 GR, 900, 694 NF, 694 MM, 694 IS, 332, 336, 610, 694 XS; 369/13; 204/192.1, 192.2, 192.26

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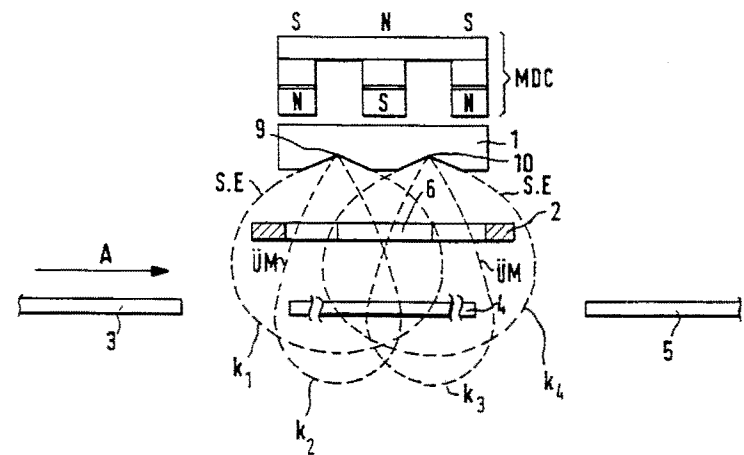
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[57] ABSTRACT

A magneto-optic layer made from rare-earth metals and transition metals exhibits a gradient in the alloy composition over the layer depth, and has a coercive field strength of more than 8 kOe in the temperature range of $\Delta T=100^\circ \text{C}$. around the compensation temperature T_{comp} . The layer is fabricated with a dynamic sputter process, in which the substrates to be coated are led past one or a plurality of sputter targets, arranged in a common plane parallel to the track of the substrates. A mask is located between the sputter targets and the substrates.

38 Claims, 6 Drawing Sheets



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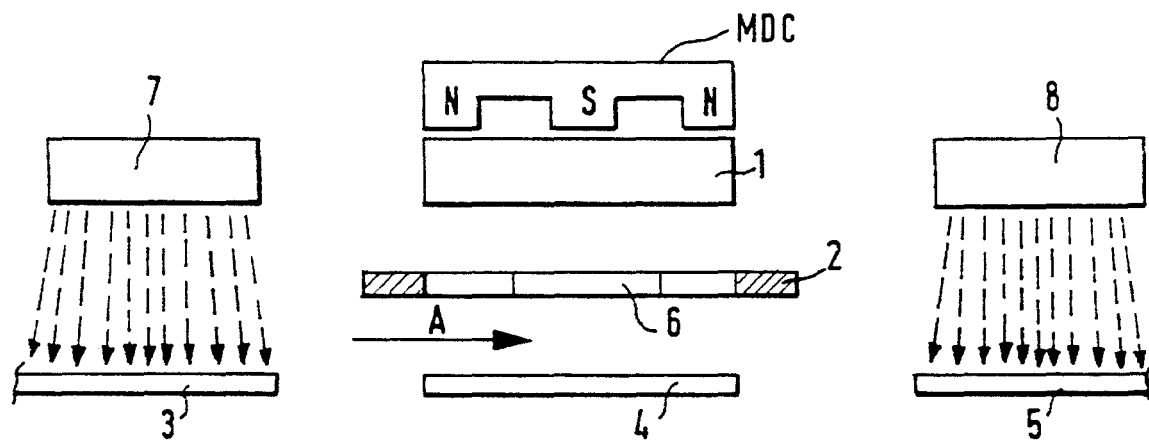
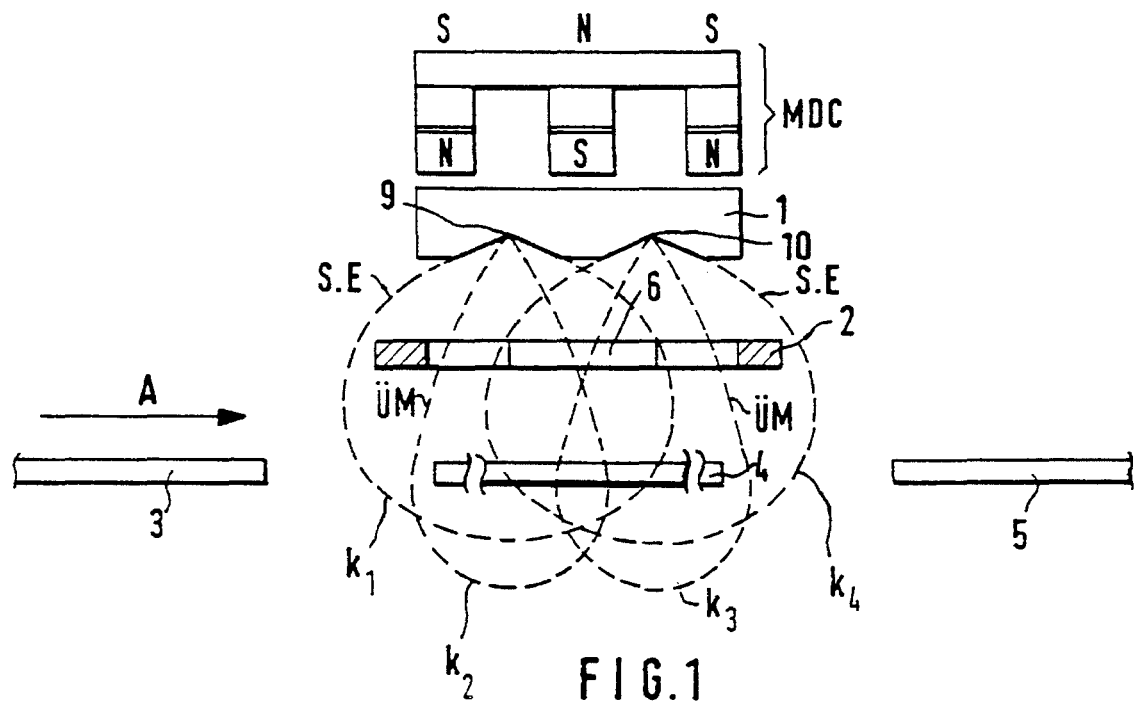


FIG. 2

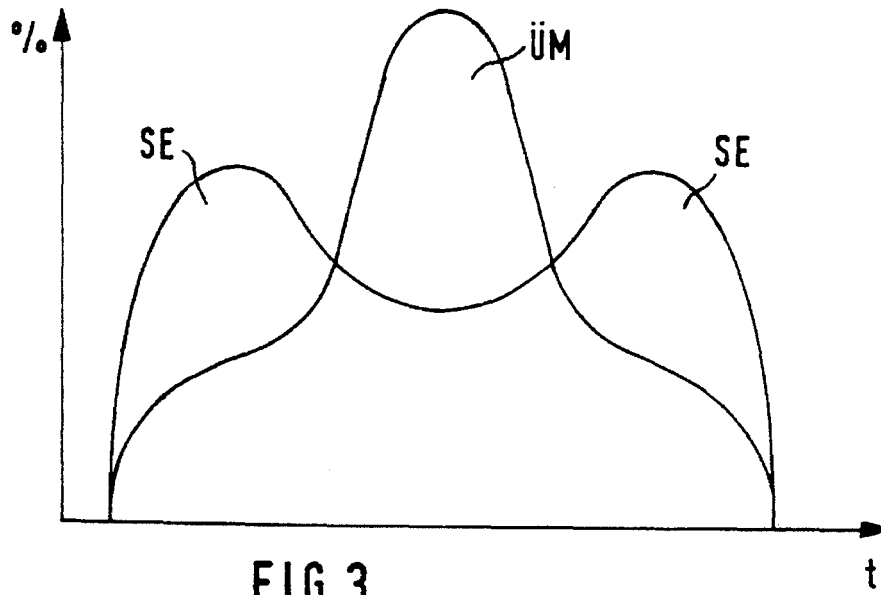


FIG.3

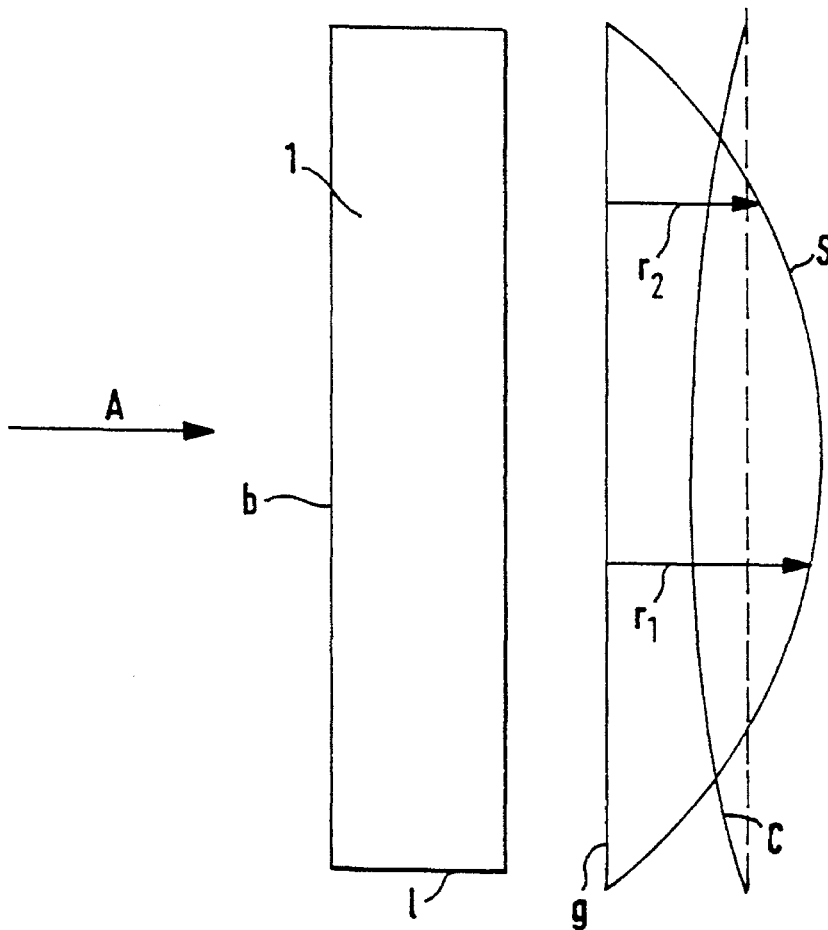


FIG.4

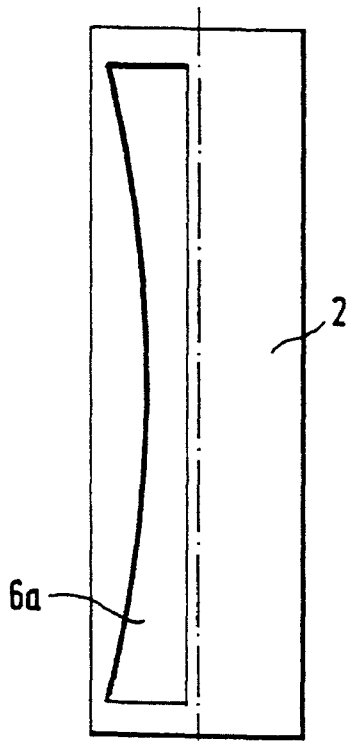


FIG. 5A

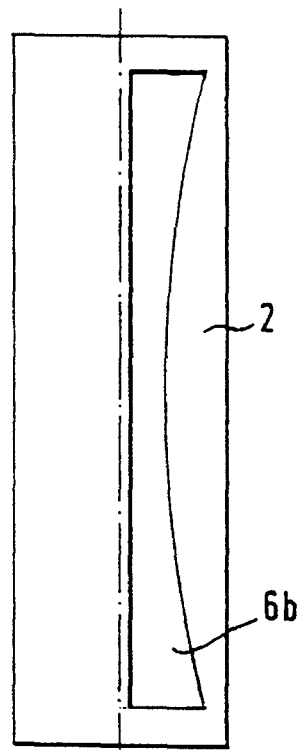


FIG. 5B

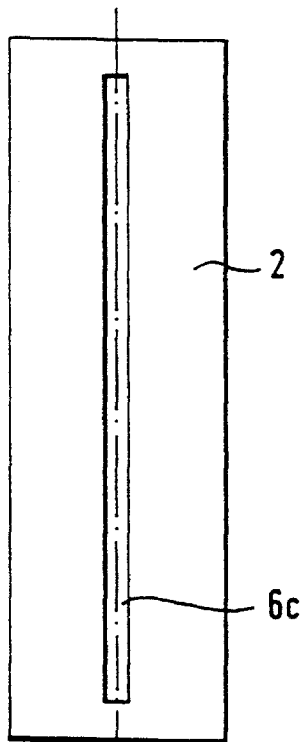


FIG. 5C

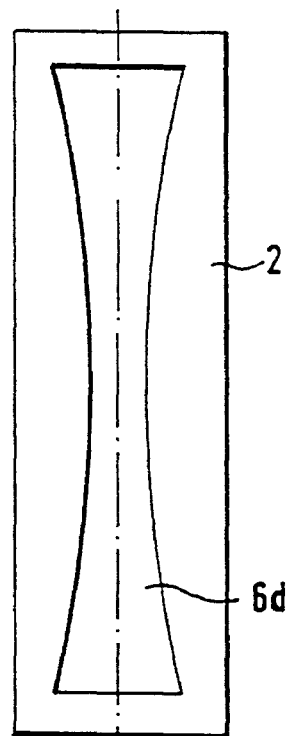


FIG. 5D

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