

CONTACT MAGNETIC TRANSFER OF SERVO PATTERN TO RIGID PERPENDICULAR MAGNETIC RECORDING DISK

Abstract of the Disclosure

A contact magnetic transfer method forms a pattern of magnetized servo regions in the magnetic recording layer of a rigid perpendicular magnetic recording disk. A master disk or template has a rigid or flexible base with a first film of soft magnetic material on the base and a pattern of islands of soft magnetic material on and extending above the first film and recesses between the islands. The slave disk to be servo patterned is either DC magnetized in a first direction perpendicular to the plane of the recording layer or AC-erased. The slave disk is then placed with its outer layer in proximity to the islands of the master template and a magnetic field is applied in a perpendicular direction to magnetize the regions beneath the islands in the same direction as the applied field. In the regions of the recording layer beneath the recesses of the template the magnetization is reversed from that in the regions beneath the islands.

Figure 3B