Patterned Media: Processing Technology

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Presentation

Abstract: In the field of magnetic recording, patterned media continues to gain momentum as a follow-on technology to continuous perpendicular recording. Patterned media is one of the more challenging examples of nano-technology given the size scale, precision, and throughput requirements. We will examine the requirements for this technology in both the short and long term. The implications of these requirements on process technology and tools for patterning will be discussed in light of some of the unique requirements for disks. The results point to major changes in making disks. Key new technologies will need to be introduced with elements from mask technology to patterning to metrology all in the nanometer scale.