

ABSTRACT

MANUFACTURING METHOD FOR HIGH-DENSITY
DATA STORAGE MEDIA

5

A method of fabricating a high-density magnetic data-storage medium, the method comprising the steps of: (a) forming a plurality of nanodots of non-magnetic material in a regular array on a surface of a substrate, said array being notionally dividable into a plurality of clusters that each comprise a plurality of nanodots, wherein each nanodot of a
10 said cluster overlaps with neighbouring nanodots of that cluster to form a well between them; (b) depositing magnetic material onto said substrate to at least partly fill the wells of each cluster; and (c) removing material to reveal a regular array of wells filled with magnetic material, each of said wells being separated from neighbouring wells by non-magnetic material.

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Figure 3a