Report for Wood's paper: The Feasibility of Magnetic Recording at 10 Terabits Per Square Inch on Conventional Media

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Abstract—This report is purely based on my own comprehension of this paper.

I. Introduction

In 2000, Wood publishes a paper: The Feasibility of Magnetic Recording at 1 Terabits Per Square Inch [1]. It says, that conventional recording would reach a limit at around 1 Terabit/in².

However, in 2009, he admits [4] the current hard disk drive (HHD) technology is already reaching this limit.

Moreover, the Advanced Storage Technology Consortium (ASTC) [5] released the 2014 roadmap for HHD area density as shown in Fig. 1

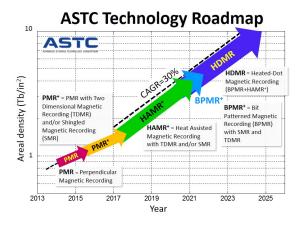


Fig. 1. Data synchronization between two devices

II. SHINGLED WRITING

uses perpendicular recording, which already reaching this limit. However, alternative technologies: heat-assisted magnetic recording (HAMR) [2] and bit patterned media (BPM) [3]

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III. CONCLUSION

The conclusion goes here.

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