

VARIABLE DISC DRIVE CYLINDER RECORDING SYSTEM

Abstract of the Disclosure

A method to dynamically map known lower performing heads for disc drives in order to reduce the likelihood of expensive manufacturing rework being conducted on the entire drive. Using the head in a drive that is performing well or better than average, the method allows one to record more bits per density on that specific head. This is especially true where zone recording is done, otherwise known as defining the recording density for a group of cylinders. Frequency-adjusting of heads (lowering the recording frequency) within a cylinder allows for variable logical block addressing schemes that correspond to a user's preferred data accessing layout. Several tracks may be accessed, while others can be reserved for system data. Advantageously, the method described works particularly well in a headerless architecture environment. The performance of lower performing or "poor" heads can be improved. Moreover, better error rates are achieved, thus overcoming yield problems. The invention may result in increase accuracy of arithmetic logic unit (ALU) calculations without having to change the engine that performs the calculations. In addition, it is likely that the discarding or reworking of entire drives, as a result of lower performing heads, becomes less.



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