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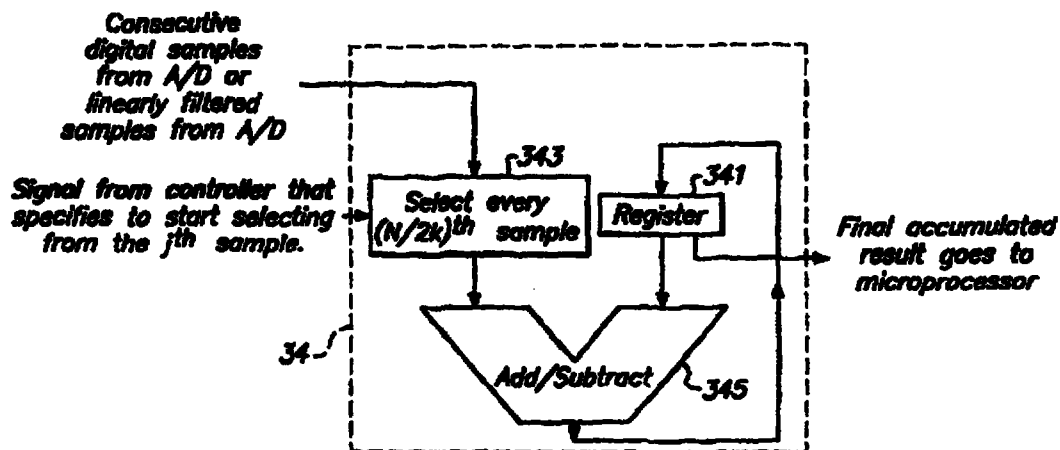


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(54) Title: METHOD AND APPARATUS FOR SPECTRAL ANALYSIS IN A DISK RECORDING SYSTEM**(57) Abstract**

A method of performing spectral analysis of signals recorded by a magnetic recording or storage system is provided using a modified channel chip of the system. The modified channel chip enables measurement of harmonic components of the recorded signal. The method is performed by reading the recorded periodic analog signal and converting the signal into a discrete time periodic signal. The discrete time periodic signal is digitally sampled at predetermined intervals, and the digital samples are selectively accumulated in a register (341) or registers of the channel chip. Incoming digital samples are accumulated by alternately being added and subtracted (345) to contents of single register (341). The accumulated results represent summations used to determine harmonic coefficients of the recorded signal. The harmonic sensor includes an arithmetic unit and a register (341) or register for accumulating the digital samples.