

APPARATUS FOR PROVIDING DYNAMIC EQUALIZER OPTIMIZATION

ABSTRACT

An apparatus for providing dynamic equalizer optimization is disclosed. The
5 present invention solves the above-described problems by providing equalizer coefficient
updates that converge towards the same solution as the direct method without having to
first write a known pattern to the disk or requiring any prior knowledge of the data
already written on the disk. The adaptive cosine function may be used to modify only a
DFIR tap set, only the j and k parameters of a cosine equalizer or to modify both the tap
10 set for a DFIR filter and the j and k parameters of the cosine equalizer. Another
algorithm, such as the LMS algorithm, may be used to modify parameters not modified
by the cosine algorithm.

Figure 4