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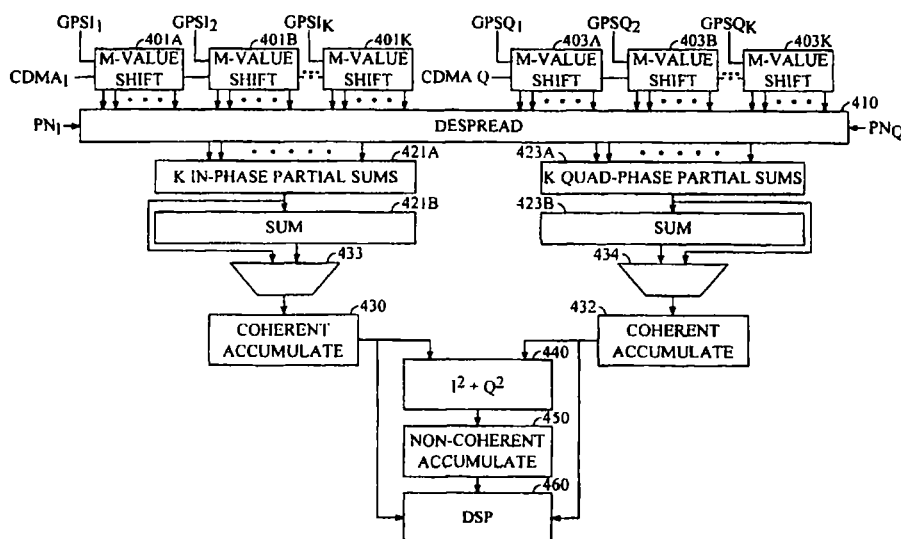
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(54) Title: **PROGRAMMABLE MATCHED FILTER SEARCHER FOR MULTIPLE PILOT SEARCHING**



(57) Abstract: A novel and improved method and apparatus for searching is described. This searcher combines the ability to search multiple offsets of single pilots, such as those found in the IS-95 system, with the ability to search multiple pilots, such as those found in a GPS location determination system. Both types of searching can be done in a single architecture combining the parallel computation features of a matched filter with the flexibility of allowing a variable number of non-coherent accumulations to be performed at high speed for a wide range of search hypotheses in a resource efficient manner. This invention allows for parallel use of the matched filter structure in a time-sliced manner to search multiple windows. In addition, the searcher allows for optional independent Walsh decoupling for each search window. The time-sharing approach allows for optional frequency searching of any offset.



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