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(54) **Title:** MEMORY DEVICE FRAGMENTATION ANALYSIS BASED ON LOGICAL-TO-PHYSICAL TABLES

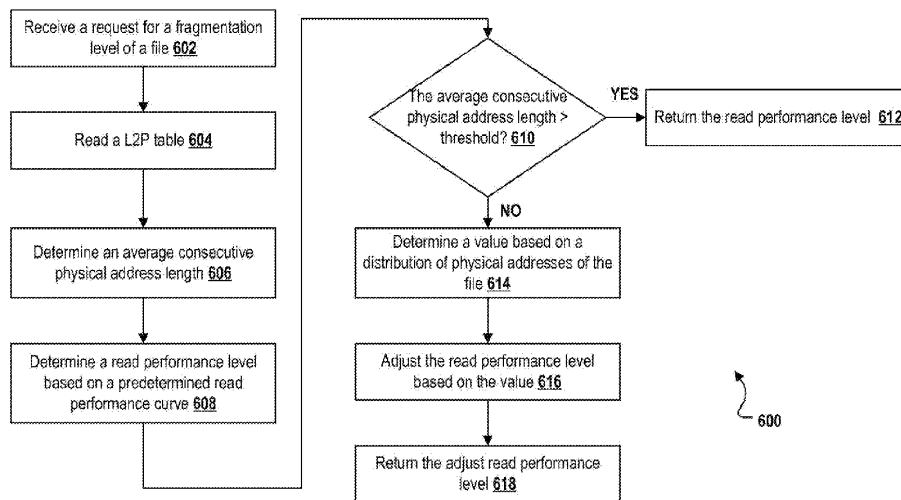


FIG. 6

(57) **Abstract:** The present disclosure relates to fragmentation evaluation in a memory system. In one example, a method for operating a memory controller includes receiving, from a host, a request for a fragmentation level of a file stored in a memory device. The method further includes determining a read performance level of the file based on a logical-to-physical (L2P) address mapping table corresponding to the file without reading the file from the memory device. The method further includes determining the fragmentation level based on the read performance level.

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