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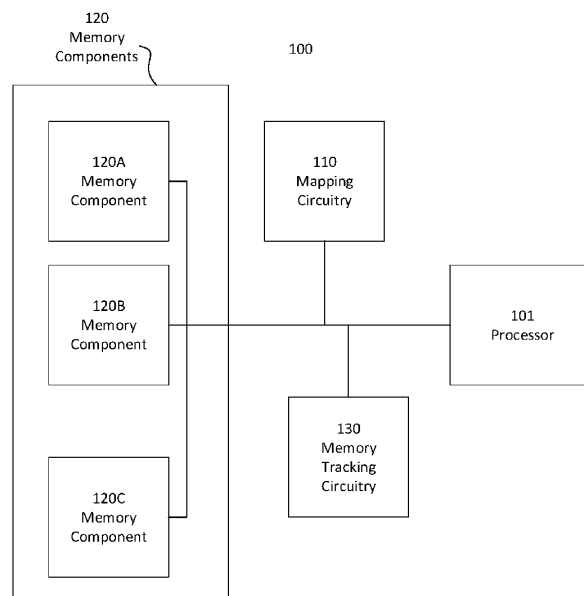


FIG. 1

(57) Abstract: An apparatus for executing a software program, comprising: a processing unit; at least one memory component, each connected to the processing unit and mapped to a range of memory addresses of the processing unit; and a memory mapping circuitry connected to the processing unit and to the memory components and configured for: in each of a plurality of iterations: accessing statistical counters collected while the processing unit executes the software program; and generating a mapping between a first memory address range and a second memory address range, subject to identifying the first range and the second range according to an analysis of the statistical counters; and in response to receiving from the processing unit a memory access command comprising a first memory address in the first range, replacing in the memory access command the first memory address with a second memory address in the second range according to the mapping.

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