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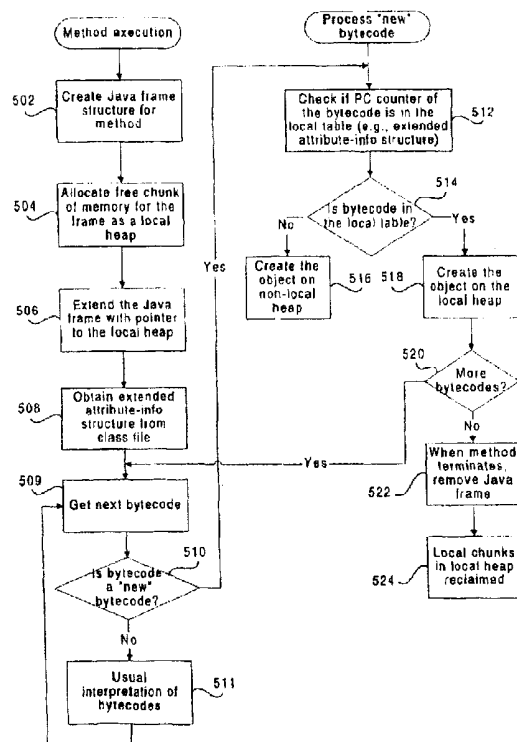
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(54) Abstract Title: **Methods and apparatus for optimizing garbage collection**

(57) Methods and apparatus for executing a method to enable memory associated with objects not referenced external to the executed method to be reclaimed upon completion of execution of the methods. Methods include obtaining a data structure including one or more addresses of source code that creates local objects, obtaining next source code in the method, and determining whether an address of the obtained next source code is in the data structure. When the address of the obtained next source code is in the data structure that creates local objects, a local object is created on a local heap of memory using the source code associated with the address such that local objects are stored in memory separately from the non-local objects.



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