METHOD AND APPARATUS FOR INCREASING SCAVENGING GARBAGE COLLECTION EFFECTIVENESS

Abstract: Methods and apparatus for enabling an efficient generational scavenging garbage collection to be performed on a managed memory area are disclosed. According to one aspect of the present invention, a method for reclaiming memory space uses a managed memory area that includes a first area and a second area. The first area is arranged to store recently allocated objects, while the second area being arranged to store older objects. The method includes determining when a first section of the first area in which new objects are to be allocated is substantially filled. When it is determined that the first section is substantially filled, a garbage collection is performed on a second section of the first. After the garbage collection, the second section is set to support new object allocation such that new objects are allocated in the second section, while the first section is reset such that it is no longer arranged to support new object allocation. In one embodiment, performing the garbage collection on the second section includes copying a live object from the second section into the first area.
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INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER
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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED
Minimum documentation searched (classification system followed by classification symbols)
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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