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Deshpande

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(54) **METHOD, COMPUTER PROGRAM AND APPARATUS FOR OPERATING SYSTEM DYNAMIC EVENT MANAGEMENT AND TASK SCHEDULING USING FUNCTION CALLS**

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Related U.S. Application Data

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(51) **Int. Cl.**
G06F 9/46 (2006.01)
G06F 9/48 (2006.01)
G06F 9/50 (2006.01)
G06F 9/54 (2006.01)

(52) **U.S. Cl.** **718/102; 718/103; 719/318**

(58) **Field of Classification Search** **719/318; 718/101-103**

See application file for complete search history.

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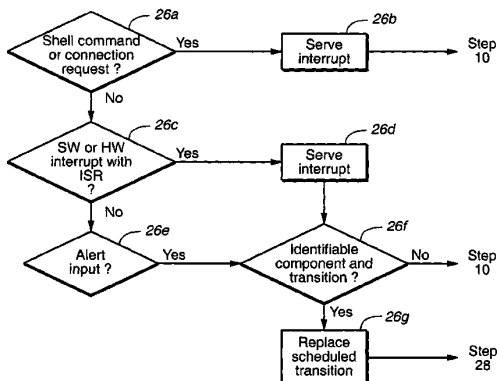
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(57) **ABSTRACT**

Method, computer program, system and apparatus for operating system dynamic event management and task scheduling using function calls. Method, computer program product, and system for non-preemptively scheduling tasks in a computer system. Scheduler and scheduling method that schedules tasks that are broken into a number of short actions, without preempting the actions as they are executed and without assigning a priority to tasks. Invention decreases the overhead as compared to existing methods and systems.

13 Claims, 8 Drawing Sheets



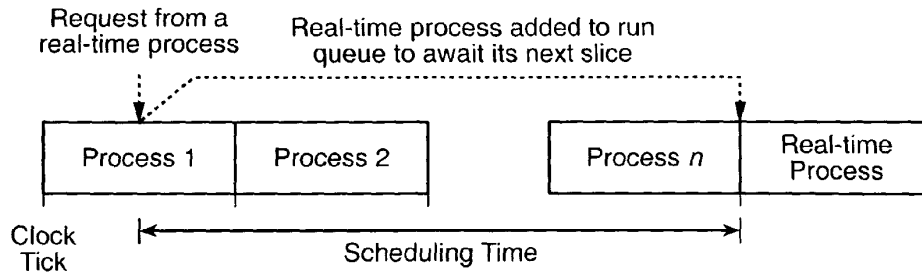
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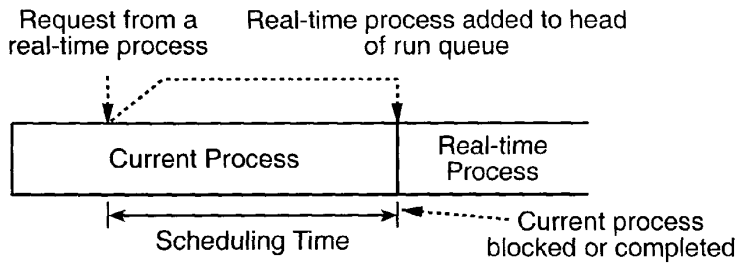
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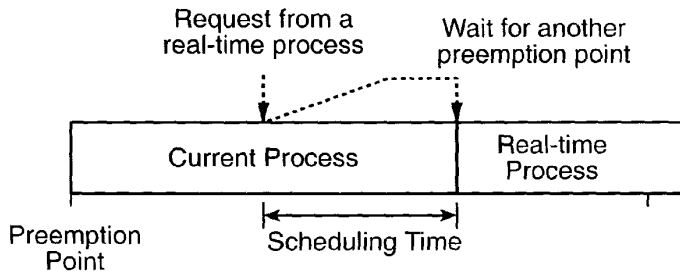
Round-robin Preemptive Scheduler

FIG. 1A



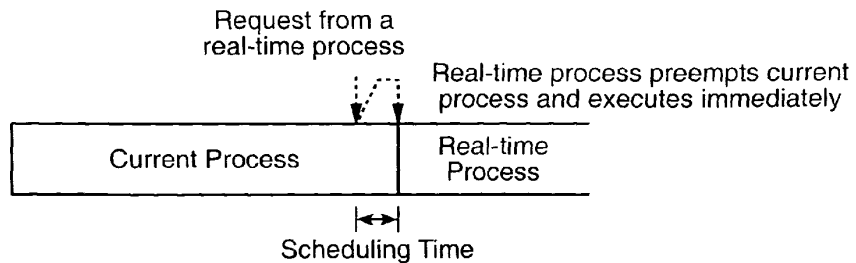
Priority-driven Nonpreemptive Scheduler

FIG. 1B



Priority-drive, Preemptive Scheduler on Preemption Points

FIG. 1C



Immediate Preemptive Scheduler

FIG. 1D

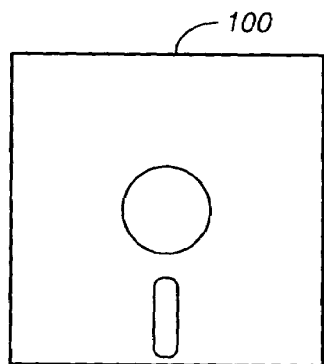


FIG. 2A

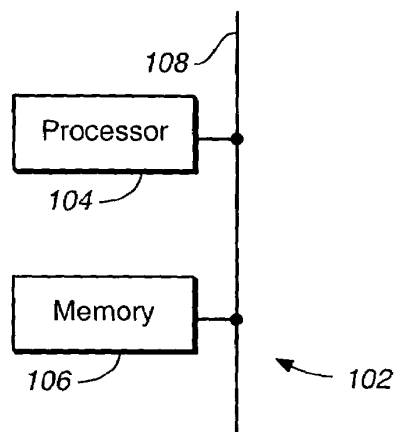


FIG. 2B

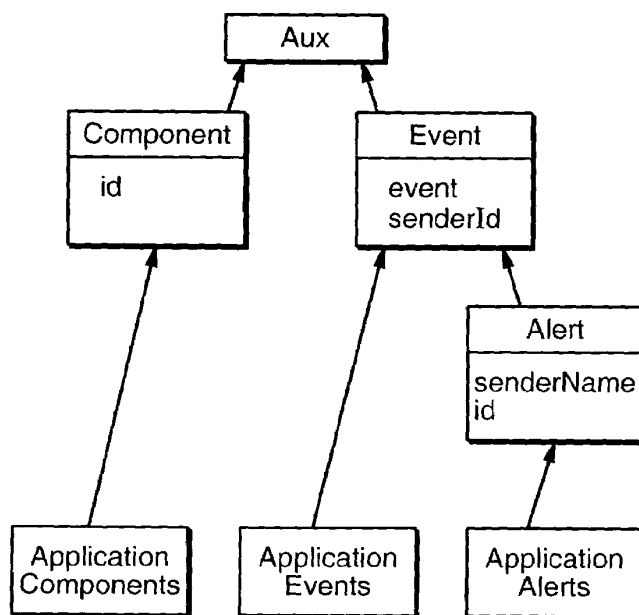


FIG. 3

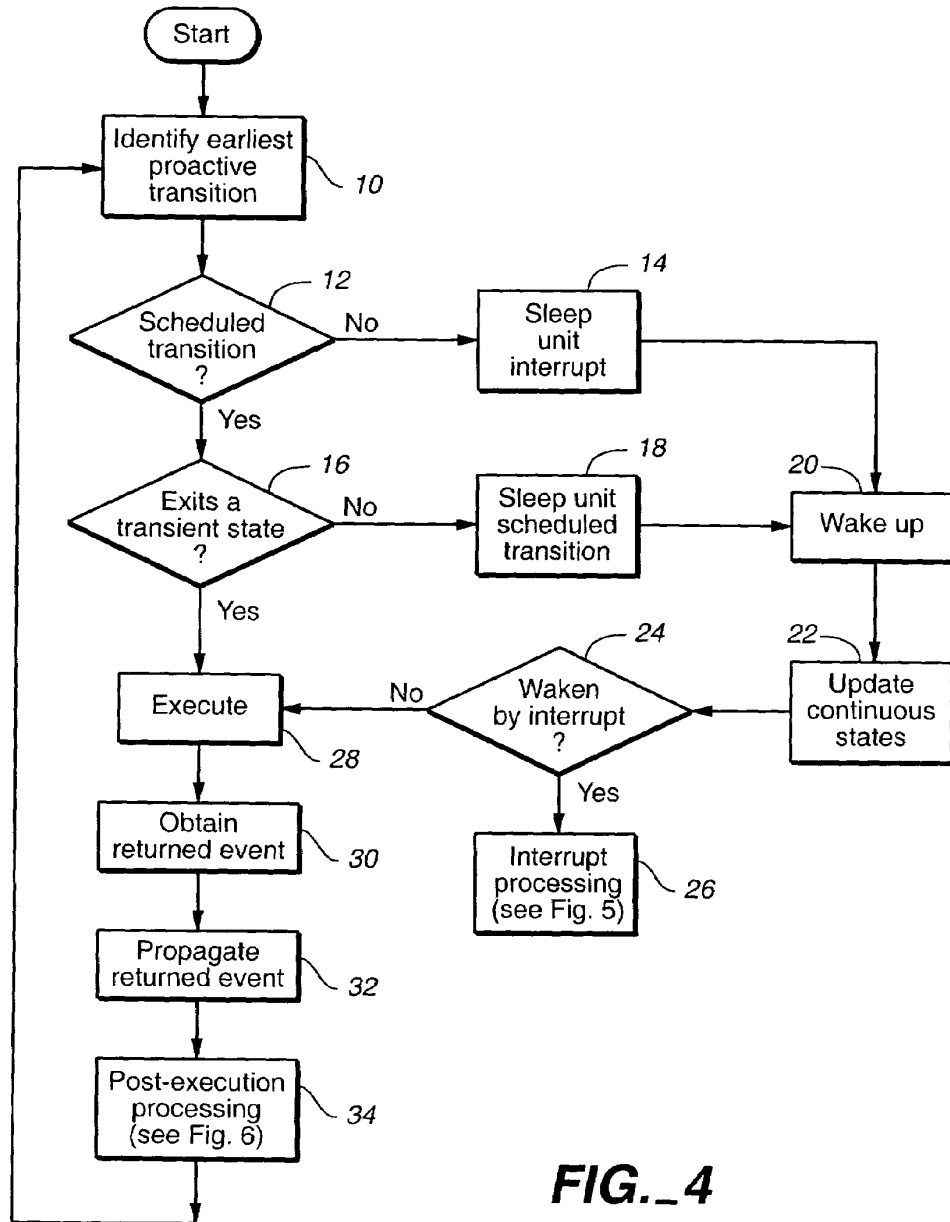


FIG. 4

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