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(54) Title: SEMAPHORE SYSTEM BASED ON PROCESS EVENTS

(57) Abstract: A method and apparatus are described for a semaphore system based on process events. The system may have multiple processes; one or more shared resources; and a semaphore system corresponding to each of the processes. When multiple processes simultaneously request access to a given shared resource, each semaphore system arbitrates on behalf of its corresponding process. In one embodiment, a semaphore system is self-contained and can arbitrate for its corresponding process based on the other process's events. In another embodiment, the semaphore system interacts with a global arbiter to resolve conflicts.