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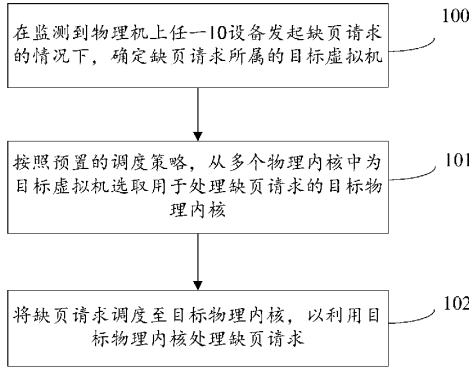
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(54) **Title:** PAGE FAULT RECOVERY METHOD, DEVICE, AND STORAGE MEDIUM

(54) 发明名称: 一种缺页恢复方法、设备及存储介质



100 In response to monitoring a page fault request initiated by any IO device on a physical machine, determine a target virtual machine to which the page fault request belongs
101 On the basis of a preconfigured scheduling policy, for the target virtual machine, select, from among a plurality of physical kernels, a target physical kernel for processing the page fault request
102 Schedule the page fault request to the target physical kernel so as to use the target physical kernel to process the page fault request

图 1

(57) **Abstract:** A page fault recovery method, a device, and a storage medium. The method comprises: in response to monitoring a page fault request initiated by any IO device on a physical machine, determining a target virtual machine to which the page fault request belongs; for the target virtual machine, selecting, from among a plurality of physical kernels, a target physical kernel for processing the page fault request; and scheduling the page fault request to the target physical kernel so as to use the target physical kernel to process the page fault request. By determining virtual machines to which IOPFs occurring in a physical machine belongs, IOPF scheduling can be performed by using the virtual machines as a constraint condition, so that the IOPFs can be prevented from being concentrated on a designated physical kernel on the physical machine for processing, and disturbance to unrelated virtual machines caused by the IOPF scheduling can be effectively avoided, thereby ensuring rational scheduling of the IOPFs, and further improving the processing efficiency of the IOPFs.

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本国际公布:
— 包括国际检索报告(条约第21条(3))。

(57) 摘要: 一种缺页恢复方法、设备及存储介质, 所述方法包括: 响应于监测到物理机上任一IO设备发起的缺页请求, 确定所述缺页请求所属的目标虚拟机; 从多个物理内核中为所述目标虚拟机选取用于处理缺页请求的目标物理内核; 将所述缺页请求调度至所述目标物理内核, 以利用所述目标物理内核处理所述缺页请求。通过明确物理机中发生的各个IOPF所属的虚拟机, 可以虚拟机为约束条件进行IOPF调度, 可避免IOPF集中到物理机上的某个指定物理内核上处理, 而且可有效规避IOPF调度对无关虚拟机造成扰动, 从而保证对IOPF的合理调度, 进而改善对IOPF的处理效率。