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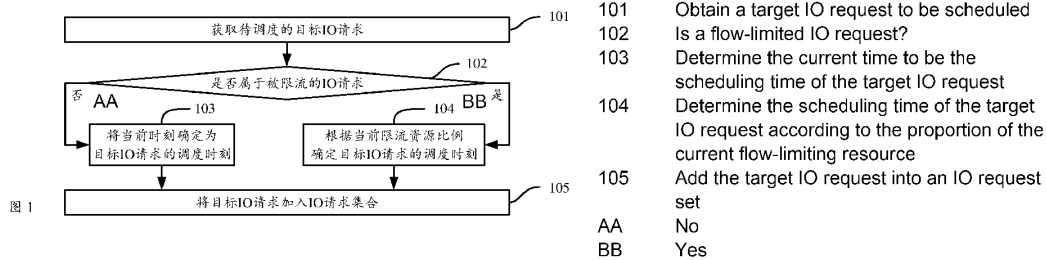
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(54) Title: SCHEDULING METHOD AND APPARATUS FOR IO REQUEST

(54) 发明名称: IO 请求的调度方法及装置



(57) Abstract: Embodiments of the present description provide a scheduling method and apparatus for an IO request. The method comprises: obtaining a target IO request to be scheduled, and determining whether the target IO request is a flow-limited IO request; when the target IO request is a non-flow-limited first-type IO request, determining the current time to be the scheduling time of the target IO request; when the target IO request is a flow-limited second-type IO request, determining the scheduling time of the target IO request according to the proportion of the current flow-limiting resource, wherein the proportion of the current flow-limiting resource is the proportion of a resource used for processing the second-type IO request within the current time period to which the current time belongs, the proportion of the current flow-limiting resource is calculated according to the proportion of a previous flow-limiting resource of a previous time period and the load information of the first-type IO request scheduled within the previous time period, and the scheduling time is not later than the current time; and adding the target IO request into an IO request set, wherein a plurality of IO requests in the IO request set are sequentially transmitted to a disk for processing according to an ascending order of the scheduling time.

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CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,
IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT,
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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：本说明书实施例中提供了一种IO请求的调度方法及装置。该方法包括：获取待调度的目标IO请求，并确定目标IO请求是否属于被限流的IO请求；目标IO请求属于未被限流的第一类IO请求时，将当前时刻确定为目标IO请求的调度时刻；目标IO请求属于被限流的第二类IO请求时，根据当前限流资源比例确定目标IO请求的调度时刻，当前限流资源比例是当前时刻所属的当前时间周期中用于处理第二类IO请求的资源比例，当前限流资源比例根据前一时间周期的前一限流资源比例和前一时间周期内调度的第一类IO请求的负载信息计算得到，调度时刻不小于当前时刻；将目标IO请求加入IO请求集合，IO请求集合中的若干IO请求按照调度时刻从小到大的顺序依次被发送到磁盘进行处理。