(12) 按照专利合作条约所公布的国际申请

(19) 世界知识产权组织
国 际 局

(43) 国际公布日
2026 年 1 月 2 日 (02.01.2026)

WIPO | PCT

(10) 国际公布号
WO 2026/000310 A1

(51) 国际专利分类号:
G06F 11/30 (2006.01)

(21) 国际申请号: PCT/CN2024/102115

(22) 国际申请日: 2024 年 6 月 27 日 (27.06.2024)

(25) 申请语言: 中文

(26) 公布语言: 中文

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(54) **Title:** DATA MONITORING METHOD, SWITCH, ELECTRONIC DEVICE, AND MEDIUM

(54) 发明名称: 数据监控方法、交换机、电子设备及介质

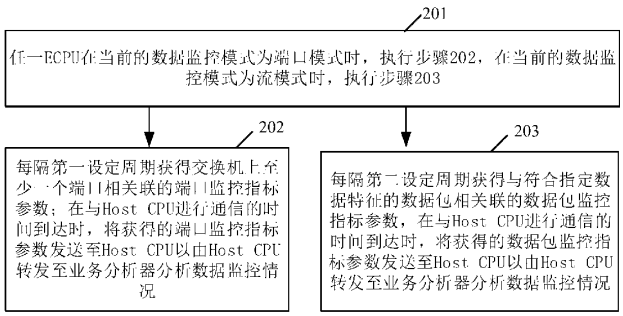


图 2

201 Any ECPU executes step 202 when the current data monitoring mode is a port mode, and executes step 203 when the current data monitoring mode is a flow mode

202 Obtain, at intervals of a first set period, a port monitoring index parameter associated with at least one port on a switch, and when it is time to communicate with a host CPU, send the obtained port monitoring index parameter to the host CPU, so that the host CPU forwards the port monitoring index parameter to a service analyzer for analysis of a data monitoring condition

203 Obtain, at intervals of a second set period, a data packet monitoring index parameter associated with a data packet conforming to a specified data feature, and when it is time to communicate with a host CPU, send the obtained data packet monitoring index parameter to the host CPU, so that the host CPU forwards the data packet monitoring index parameter to a service analyzer for analysis of a data monitoring condition

(57) **Abstract:** Provided in embodiments of the present application are a data monitoring method, a switch, an electronic device, and a medium. In this embodiment, data monitoring is no longer performed solely by a host CPU of a switch, instead, data monitoring is performed collaboratively by the host CPU and a switch chip (specifically, an embedded CPU in the switch chip, referred to as the ECPU) on the switch. The switch chip (specifically, the embedded CPU in the switch chip, referred to as the ECPU) performs data monitoring in a millisecond level or even a sub-millisecond time unit level, such as a microsecond level, and sends data to the host

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CPU, so that the host CPU forwards the data to a service analyzer for analysis. Millisecond-level data monitoring is implemented collaboratively by the local host CPU of the switch and the ECPU in the switch chip, and then an actual condition of an AI data burst in an AI training scenario of an intelligent computing center can be captured in time.

(57) 摘要: 本申请实施例提供了数据监控方法、交换机、电子设备及介质。本实施例不再由交换机的Host CPU单独进行数据监控，而是由Host CPU和交换机上Switch芯片(具体是Switch芯片内置的CPU，简称ECPU)相配合来进行数据监控，由Switch芯片(具体是Switch芯片内置的CPU，简称ECPU)执行毫秒级甚至毫秒级之下的时间单位如微秒级等的数据监控，并发送给Host CPU以由Host CPU转发给业务分析器进行分析，这通过交换机本地Host CPU与Switch芯片上的ECPU相配合实现毫秒级的数据监控，能及时捕捉到智算中心AI训练场景下AI数据突发的实际情况。