

(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



(10) 国际公布号
WO 2024/093543 A1

(43) 国际公布日
2024 年 5 月 10 日 (10.05.2024)

WIPO | PCT

(51) 国际专利分类号:
G06F 16/23 (2019.01)

(21) 国际申请号: PCT/CN2023/118659

(22) 国际申请日: 2023 年 9 月 13 日 (13.09.2023)

(25) 申请语言: 中文

(26) 公布语言: 中文

(30) 优先权:
202211358893.8 2022 年 11 月 1 日 (01.11.2022) CN

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(54) **Title:** TIMESTAMP ASSIGNMENT METHOD AND APPARATUS APPLIED TO DISTRIBUTED DATABASE

(54) 发明名称: 一种应用于分布式数据库的时间戳分配方法及装置

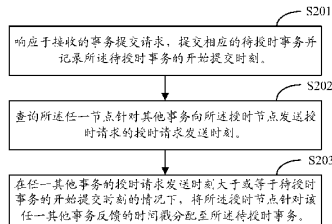


图 2

S201 In response to a received transaction submission request, submit a corresponding transaction to be timed and record a submission start moment of the transaction to be timed
S202 Query a timing request sending moment at which any node sends a timing request to the timing node in respect of another transaction
S203 When a timing request sending moment of any other transaction is greater than or equal to the submission start moment of the transaction to be timed, assign a timestamp fed back by the timing node in respect of any other transaction to the transaction to be timed

(57) **Abstract:** The present description provides a timestamp assignment method and apparatus applied to a distributed database. Nodes in a distributed database comprise a timing node and a normal node. The method is applied to any node, and comprises: in response to a received transaction submission request, submitting a corresponding transaction to be timed and recording a submission start moment of the transaction to be timed; querying a timing request sending moment at which any node sends a timing request to the timing node in respect of another transaction; and when a timing request sending moment of any other transaction is not earlier than the submission start moment of the transaction to be timed, assigning a timestamp fed back by the timing node in respect of any other transaction to the transaction to be timed. According to the technical solution of the present description, the frequency of sending timestamp acquisition requests by the nodes to the timing node can be effectively reduced, the load of the timing node is reduced, the problem that it takes too much time for the timing node to return a timing response due to the overload of the timing node is avoided, and the processing efficiency of transactions is improved.

(57) **摘要:** 本说明书提出了一种应用于分布式数据库的时间戳分配方法及装置, 所述分布式数据库的节点包括授时节点和普通节点, 所述方法应用于任一节点, 该方法可以包括: 响应于接收的事务提交请求, 提交相应的待授时事务并记录待授时事务的开始提交时刻; 查询任一节点针对其他事务向授时节点发送授时请求的授时请求发送时刻; 在任一其他事务的授时请求发送时刻不早于待授时事务的开始提交时刻的情况下, 将授时节点针对该任一其他事务反馈的时间戳分配至所述待授时事务。通过本说明书的技术方案, 可以有效降低各节点向授时节点发送获取时间戳请求的频率, 减少授时节点的负载, 避免因授时节点过载导致授时节点返回授时响应过久的问题, 提高各个事务的处理效率。

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WO 2024/093543 A1

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