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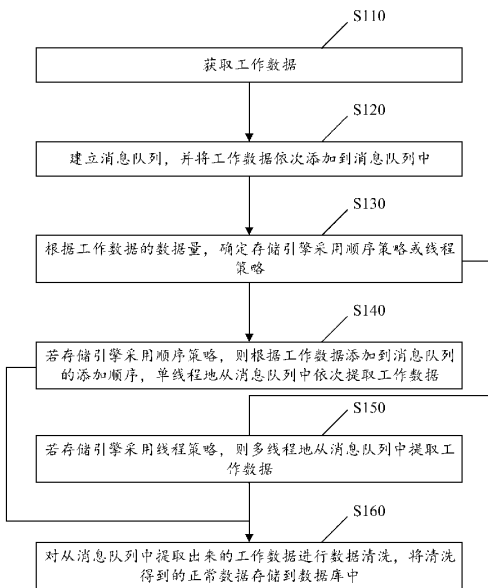
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(54) Title: DATA STORAGE METHOD, AUTOMATION SYSTEM, AND MECHANICAL EQUIPMENT

(54) 发明名称: 存储数据的方法、自动化系统及机械设备



S110 Acquire work data
S120 Establish a message queue, and successively add the work data to the message queue
S130 According to the data volume of the work data, determine whether a storage engine uses a sequential policy or a thread policy
S140 If the storage engine uses the sequential policy, sequentially extract in a single-thread mode the work data from the message queue according to the adding sequence of adding the work data to the message queue
S150 If the storage engine uses the thread policy, extract in a multi-thread mode the work data from the message queue
S160 Perform data cleaning on the work data extracted from the message queue, and store in a database normal data obtained after cleaning

图 1

(57) Abstract: The present application relates to the technical field of automation mechanical equipment, in particular to a data storage method, an automation system, and mechanical equipment. The method comprises: acquiring work data, and successively adding same to a message queue; according to the data volume of the work data, determining whether a storage engine uses a sequential policy or a thread policy; if the storage engine uses the sequential policy, sequentially extracting in a single-thread mode the work data from the message queue according to the adding sequence of adding the work data to the message queue; if the storage engine uses the thread

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policy, extracting in a multi-thread mode the work data from the message queue; and performing data cleaning on the extracted work data, and storing in a database normal data obtained after cleaning. The embodiments in the present application use the single thread when the data volume is low so as to avoid waste of computing power, and use multiple threads during data peaks having large data volumes so as to ensure the data processing speed; and the present application can further perform data cleaning on the work data so as to ensure that only normal data is stored in the database.

(57) 摘要: 本申请涉及自动化机械设备技术领域，具体涉及存储数据的方法、自动化系统及机械设备，该方法包括：获取工作数据，并依次添加到消息队列中；根据工作数据的数据量，确定存储引擎采用顺序策略或线程策略；若存储引擎采用顺序策略，则根据工作数据添加到消息队列的添加顺序，单线程地从消息队列中依次提取工作数据；若存储引擎采用线程策略，则多线程地从消息队列中提取工作数据；对提取出来的工作数据进行数据清洗，将清洗得到的正常数据存储到数据库中。本申请实施例中，能够在低数据量时，采用单线程，避免算力浪费；在数据量较大的数据高峰时，采用多线程，保证数据处理速度，还可以对工作数据进行数据清洗，以保证存入数据库的是正常数据。