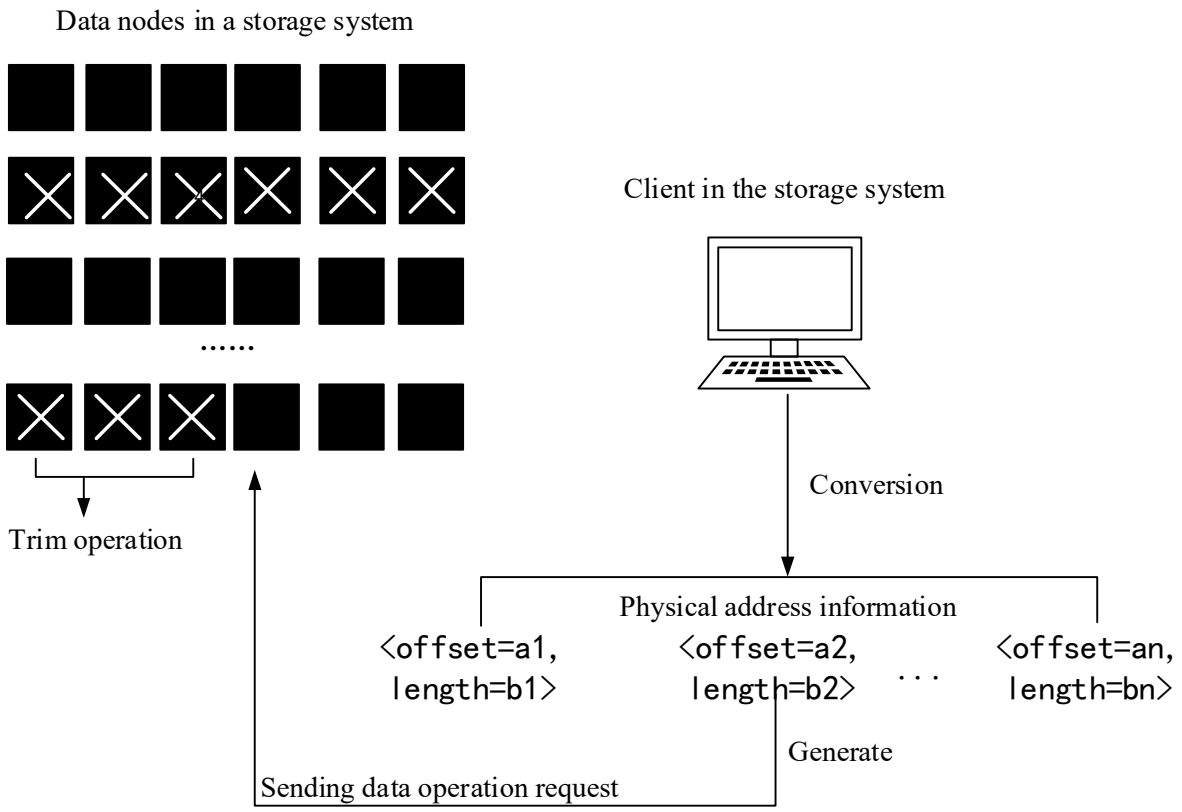

Data nodes in a storage system
.....
Trim operation
Client in the storage system
Conversion
Physical address information
<offset=a1, length=b1>
<offset=a2, length=b2>
...
<offset=an, length=bn>
Generate
Sending data operation request

FIG. 1

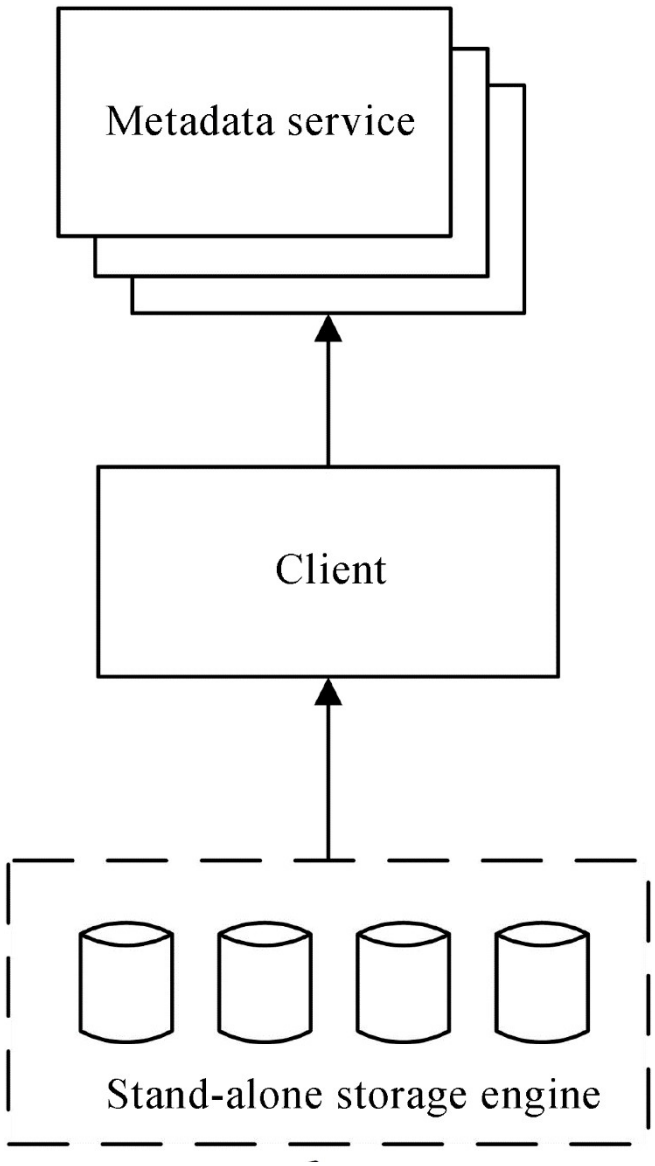


FIG. 2a

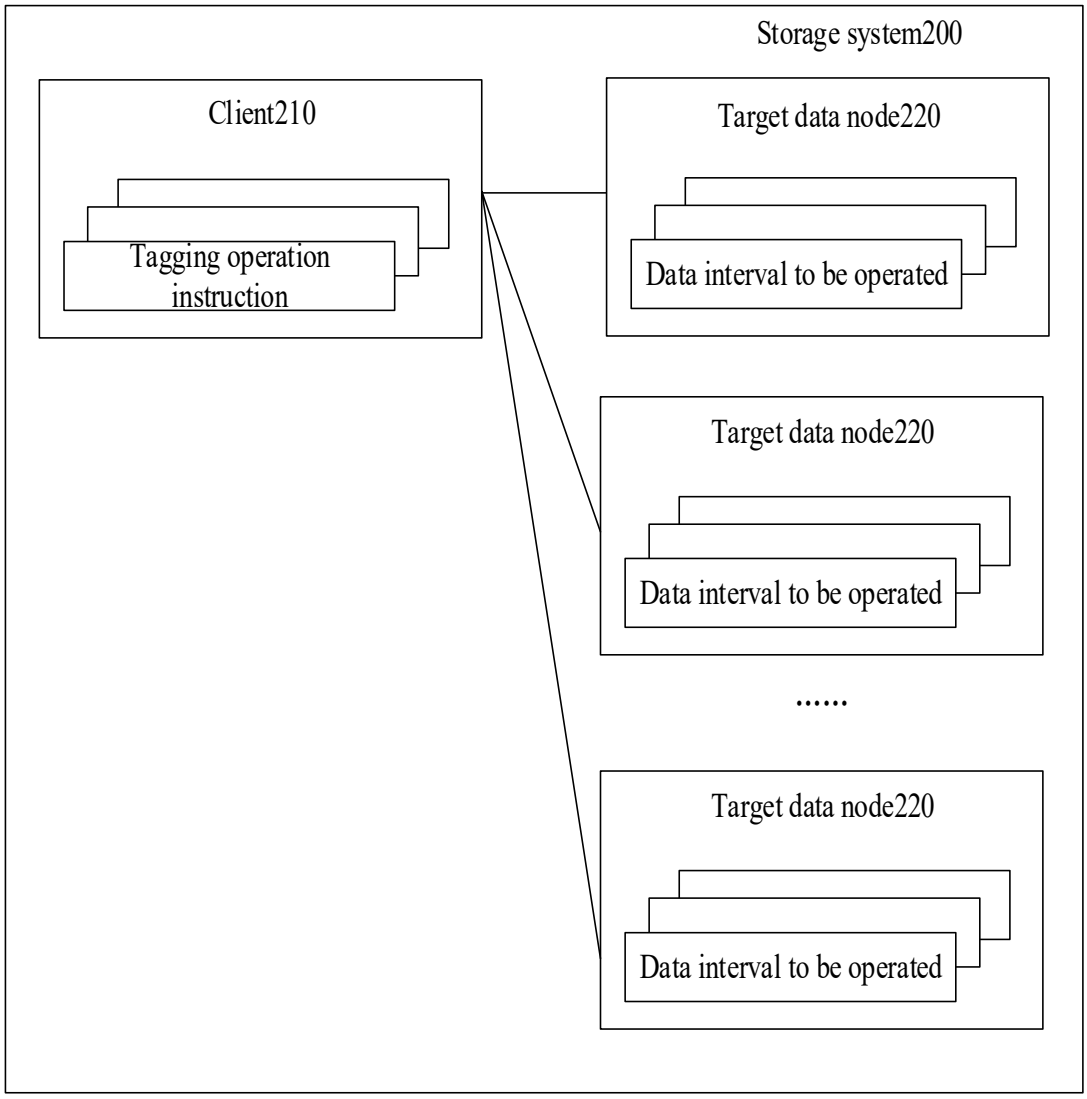

Storage system200
Client210
Tagging operation instruction
Target data node220
Data interval to be operated
Target data node220
Data interval to be operated
.....
Target data node220
Data interval to be operated

FIG. 2b

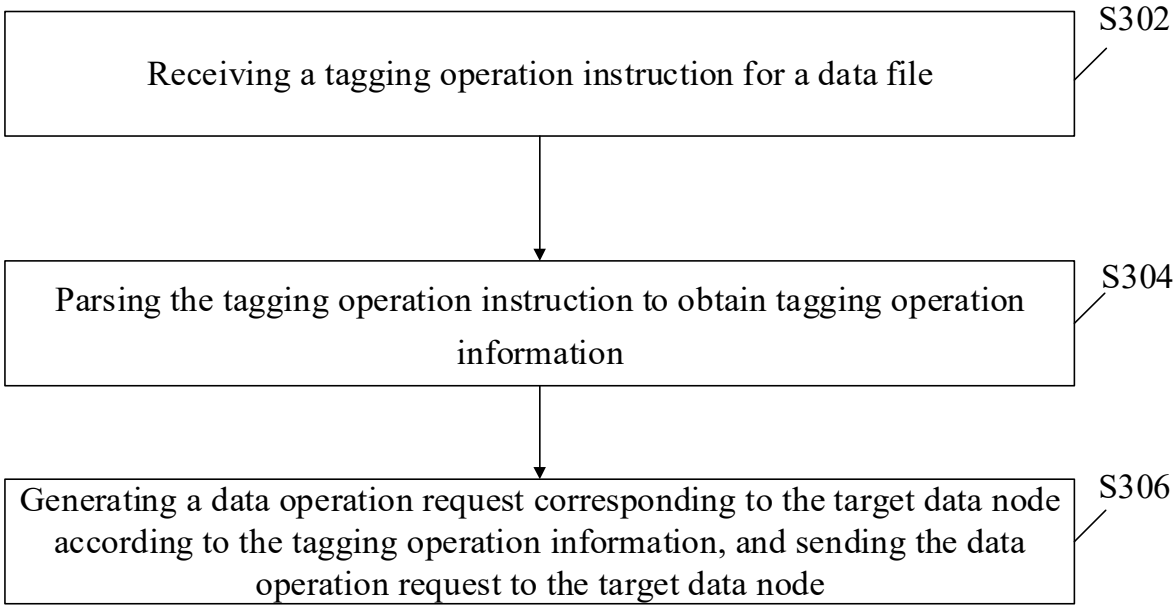

Receiving a tagging operation instruction for a data file
S302
Parsing the tagging operation instruction to obtain tagging operation information
S304
Generating a data operation request corresponding to the target data node according to the tagging operation information, and sending the data operation request to the target data node
S306

FIG. 3

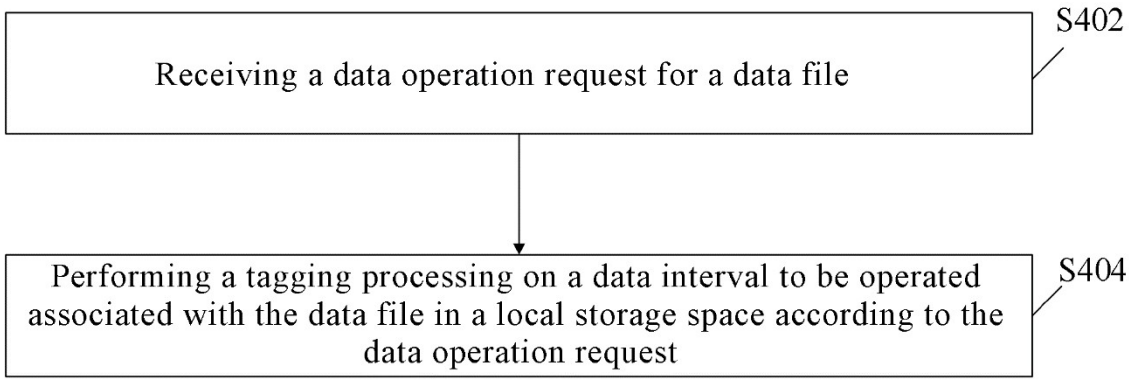

Receiving a data operation request for a data file
S402
Performing a tagging processing on a data interval to be operated associated with the data file in a local storage space according to the data operation request
S404

FIG. 4

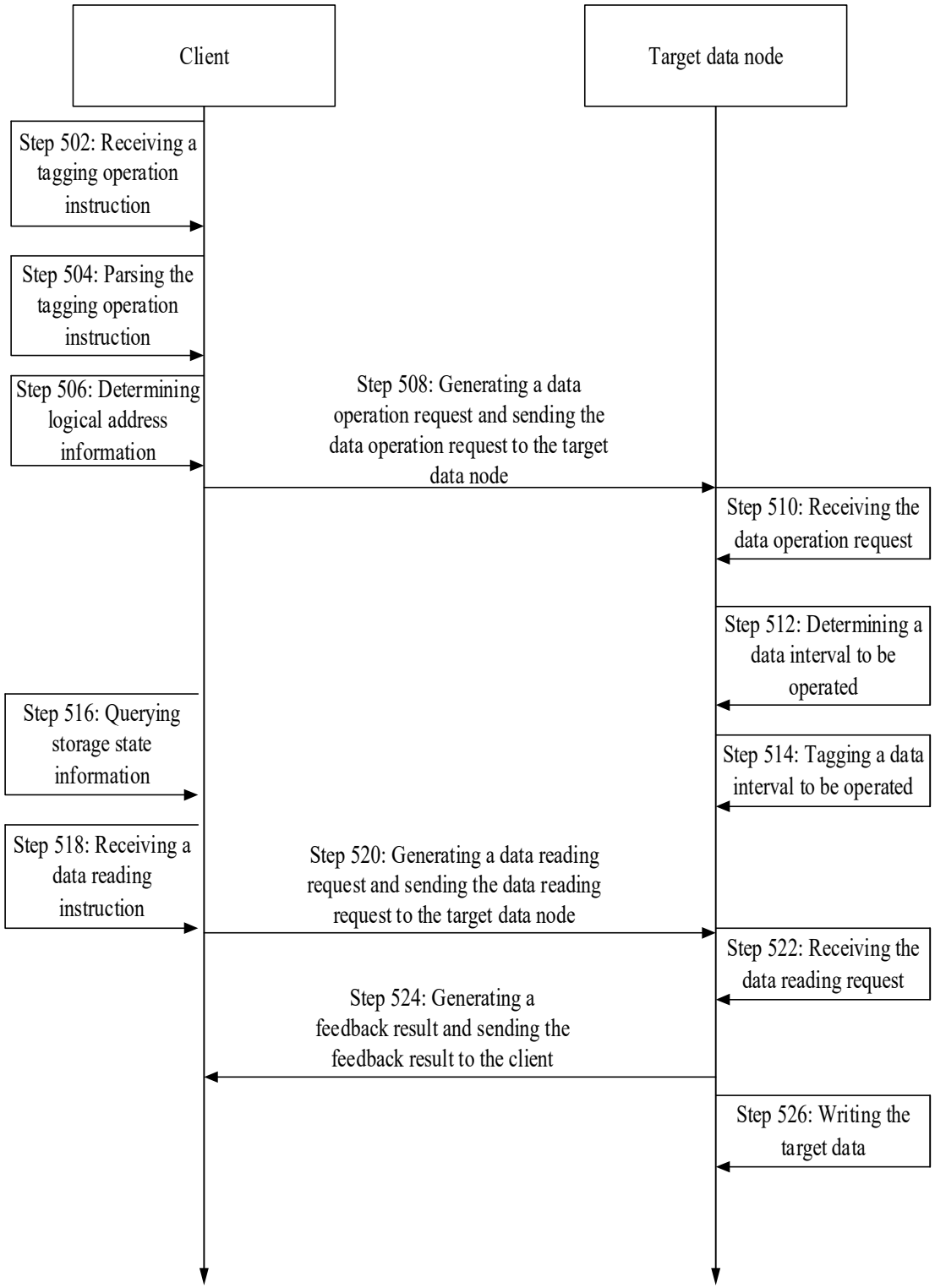

Client
Target data node
Step 502: Receiving a tagging operation instruction
Step 504: Parsing the tagging operation instruction
Step 506: Determining logical address information
Step 508: Generating a data operation request and sending the data operation request to the target data node
Step 510: Receiving the data operation request
Step 512: Determining a data interval to be operated
Step 514: Tagging a data interval to be operated
Step 516: Querying storage state information
Step 518: Receiving a data reading instruction
Step 520: Generating a data reading request and sending the data reading request to the target data node
Step 522: Receiving the data reading request
Step 524: Generating a feedback result and sending the feedback result to the client
Step 526: Writing the target data

FIG. 5

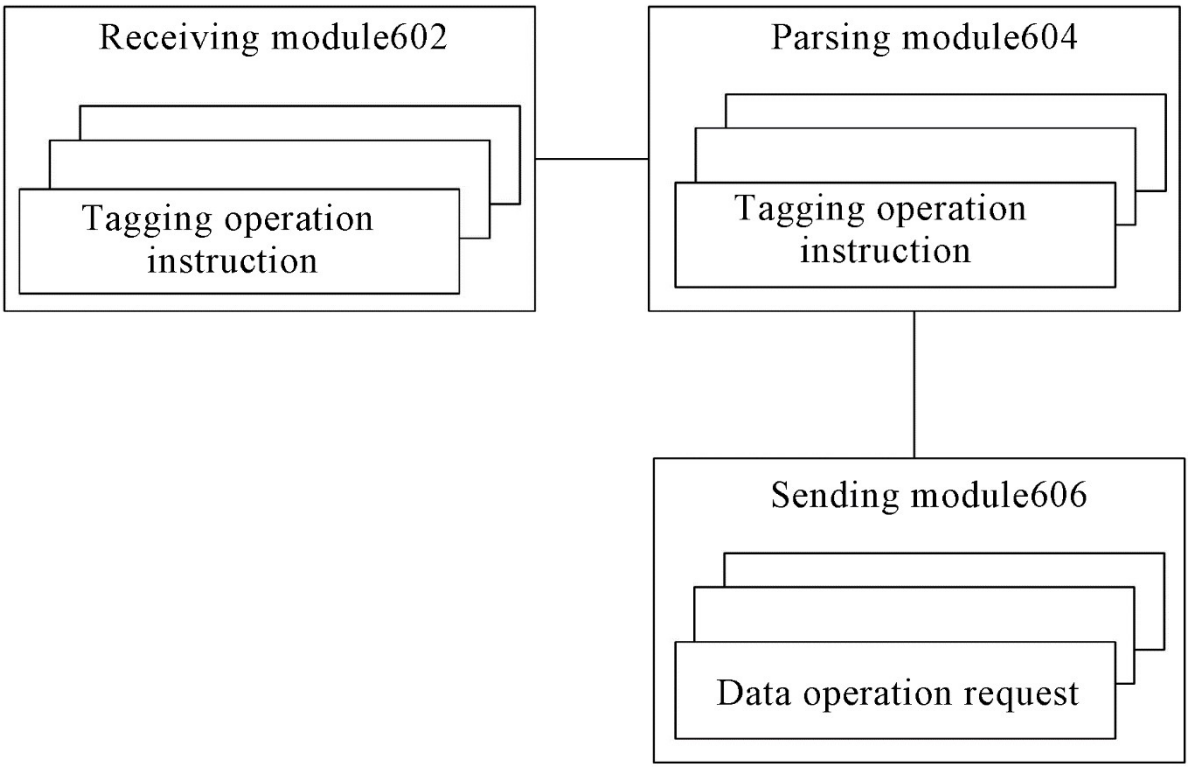

Receiving module602
Tagging operation instruction
Parsing module604
Tagging operation instruction
Sending module606
Data operation request

FIG. 6

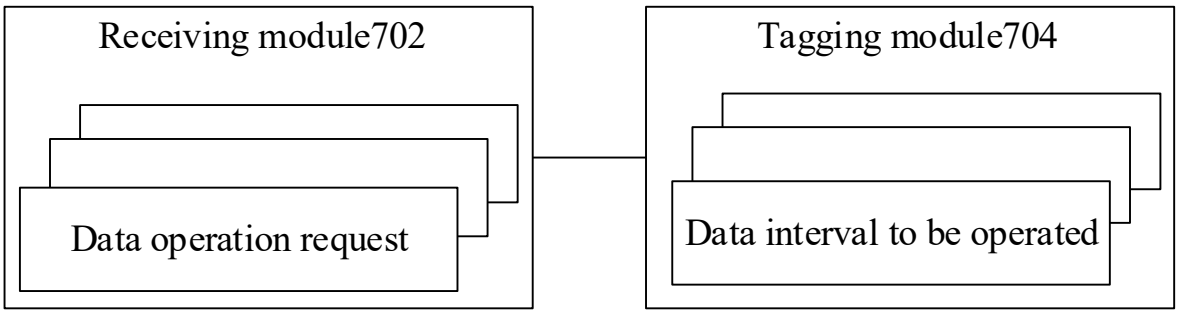

Receiving module702
Data operation request
Tagging module704
Data interval to be operated

FIG. 7

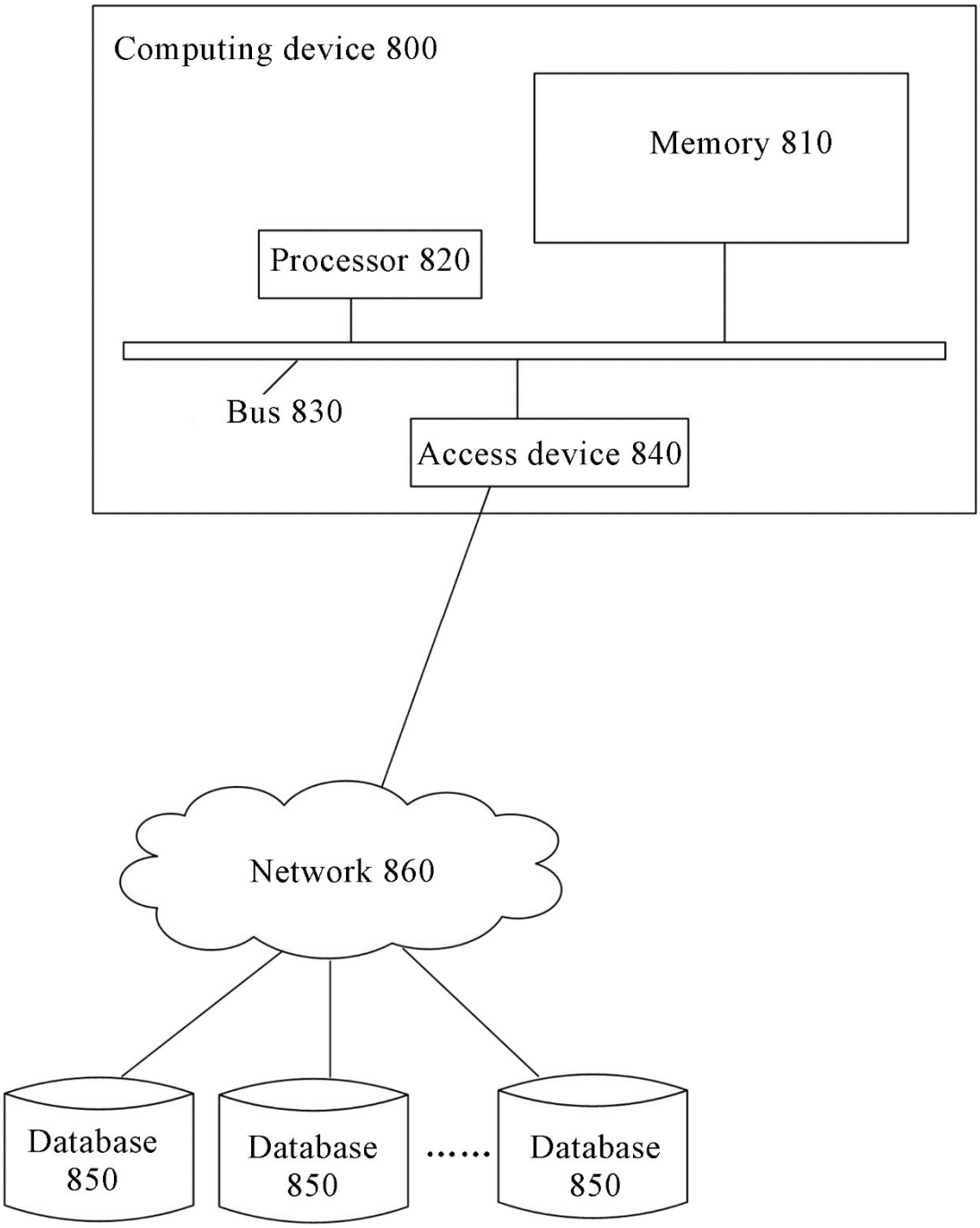

Computing device 800
Memory 810
Processor 820
Bus 830
Access device 840
Network 860
Database 850
Database 850
.....
Database 850

FIG. 8