Application scenario 100

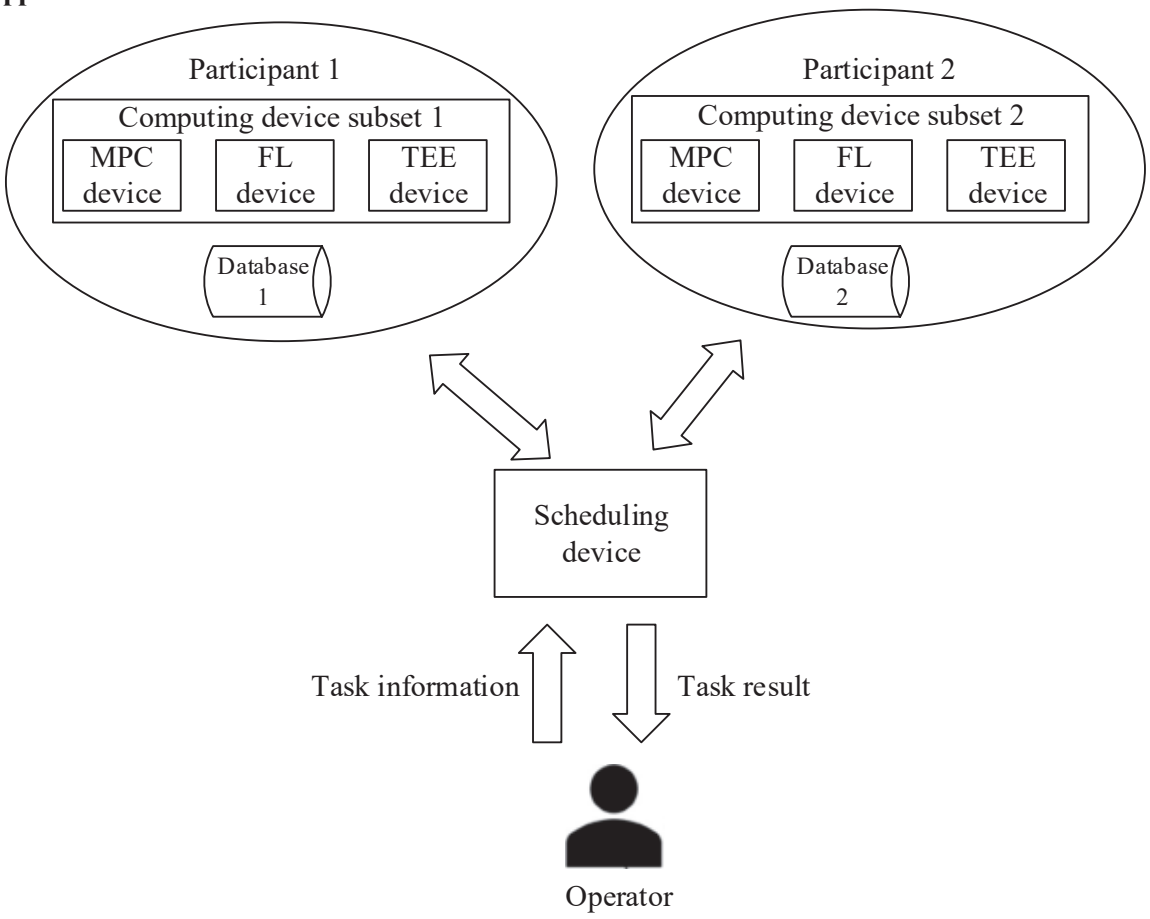

FIG. 1

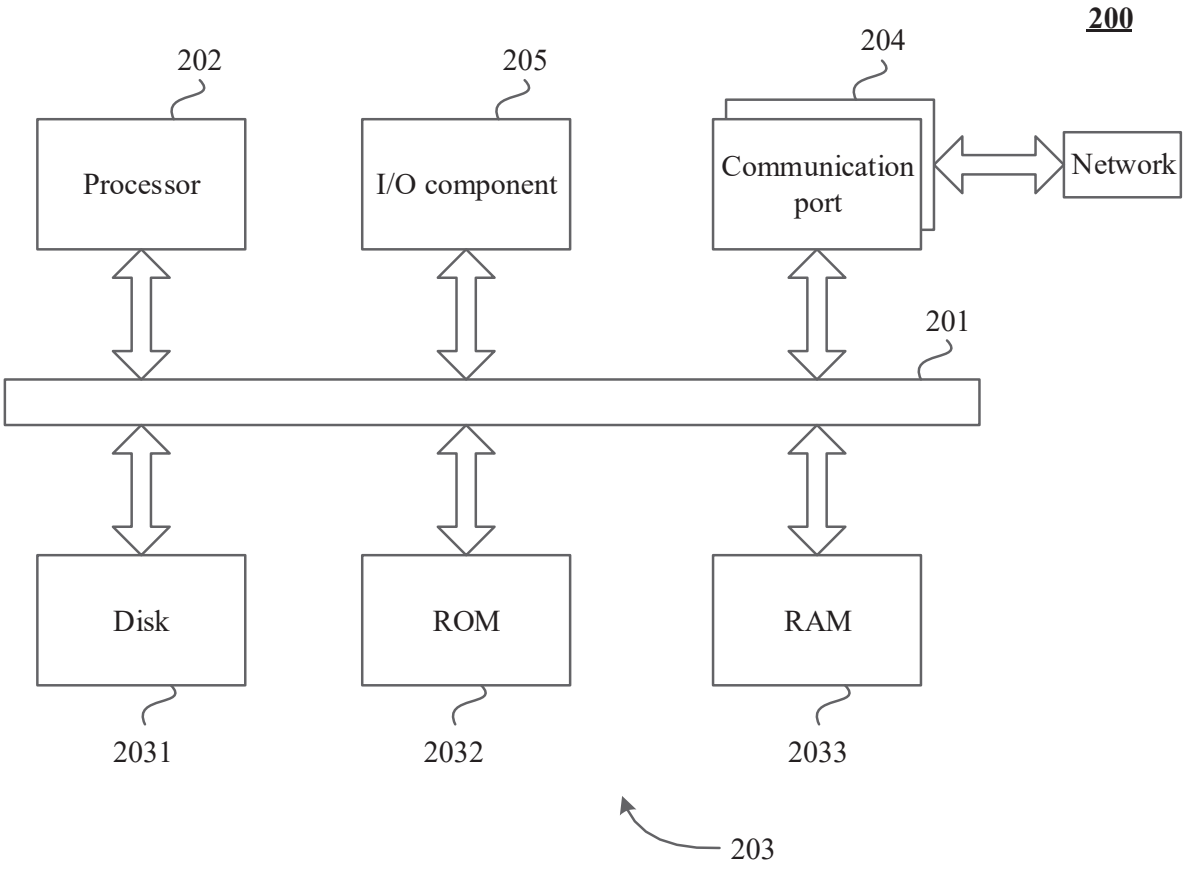
200
202
205
204
Processor
I/O component
Communication port
Network
201
Disk
ROM
RAM
2031
2032
2033
203

FIG. 2

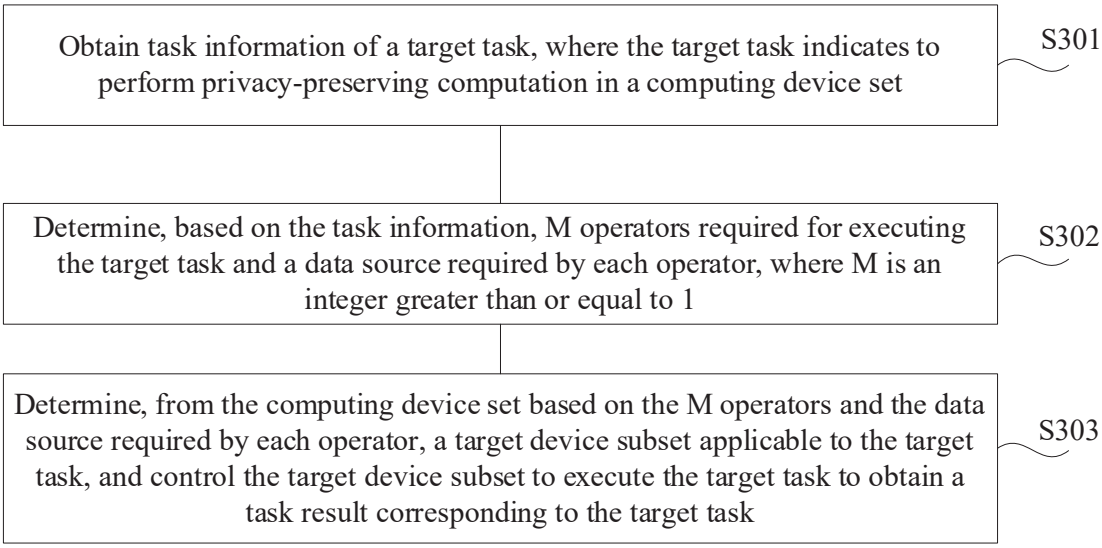
Obtain task information of a target task, where the target task indicates to perform privacy-preserving computation in a computing device set
S301
Determine, based on the task information, M operators required for executing the target task and a data source required by each operator, where M is an integer greater than or equal to 1
S302
Determine, from the computing device set based on the M operators and the data source required by each operator, a target device subset applicable to the target task, and control the target device subset to execute the target task to obtain a task result corresponding to the target task
S303

FIG. 3

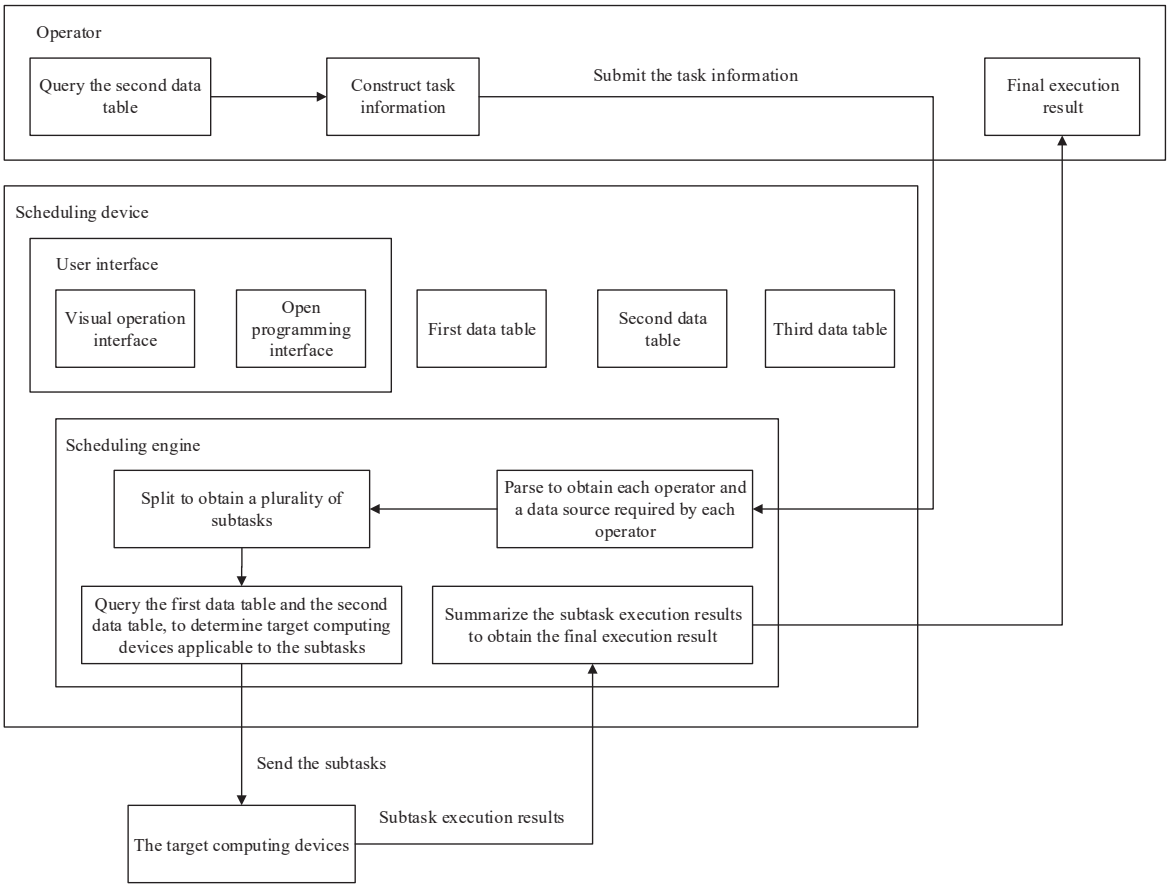
Operator
Query the second data table
Construct task information
Submit the task information
Final execution result
Scheduling device
User interface
Visual operation interface
Open programming interface
First data table
Second data table
Third data table
Scheduling engine
Split to obtain a plurality of subtasks
Parse to obtain each operator and a data source required by each operator
Query the first data table and the second data table, to determine target computing devices applicable to the subtasks
Summarize the subtask execution results to obtain the final execution result
Send the subtasks
The target computing devices
Subtask execution results

FIG. 4

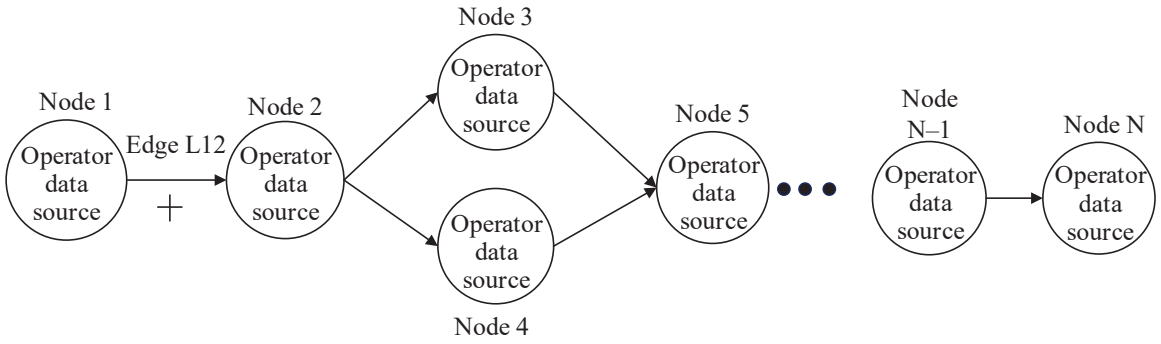
Node 1
Operator data source
Edge L12
Node 2
Operator data source
Node 3
Operator data source
Operator data source
Node 4
Node 5
Operator data source
Node N–1
Operator data source
Node N
Operator data source

FIG. 5

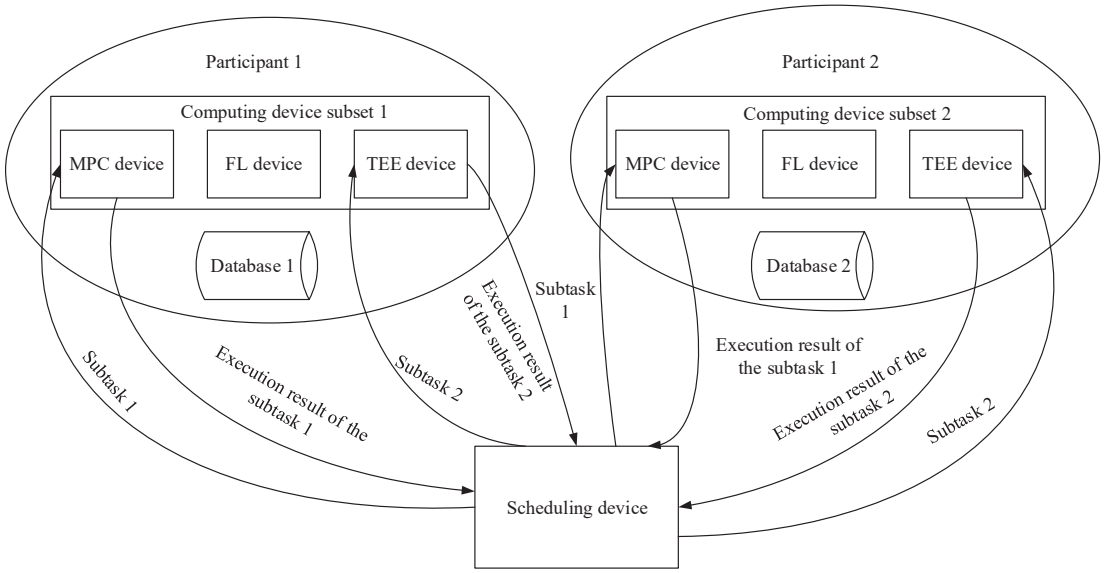
Participant 1
Computing device subset 1
MPC device
FL device
TEE device
Database 1
Participant 2
Computing device subset 2
MPC device
FL device
TEE device
Database 2
Subtask 1
Execution result of the subtask 2
Subtask 2
Execution result of the subtask 1
Subtask 1
Execution result of the subtask 1
Execution result of the subtask 2
Subtask 2
Scheduling device

FIG. 6