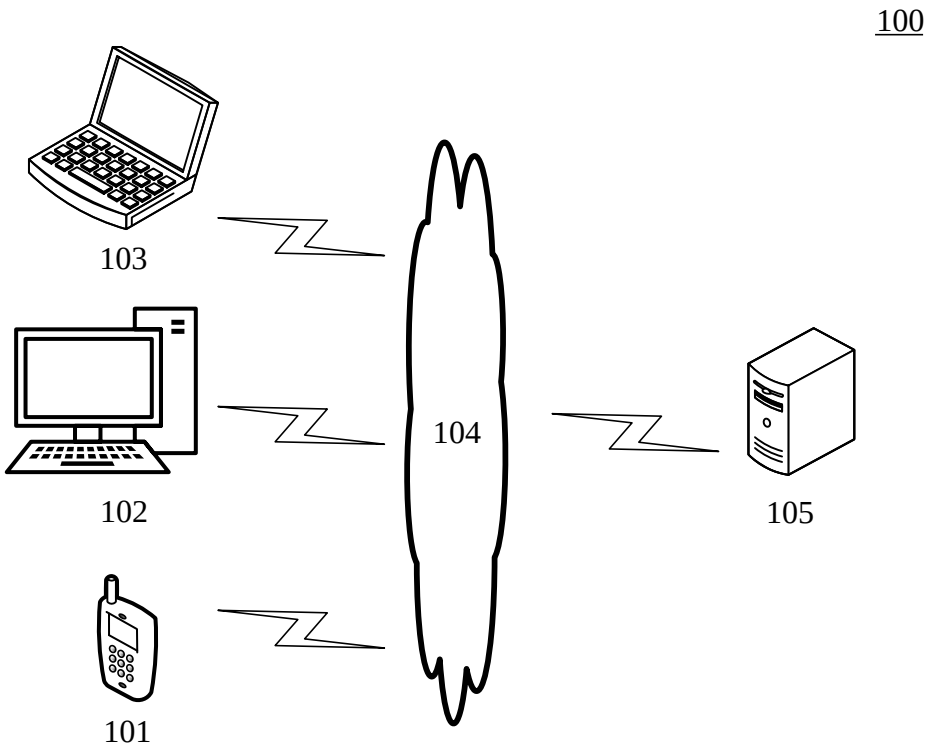


Fig. 1

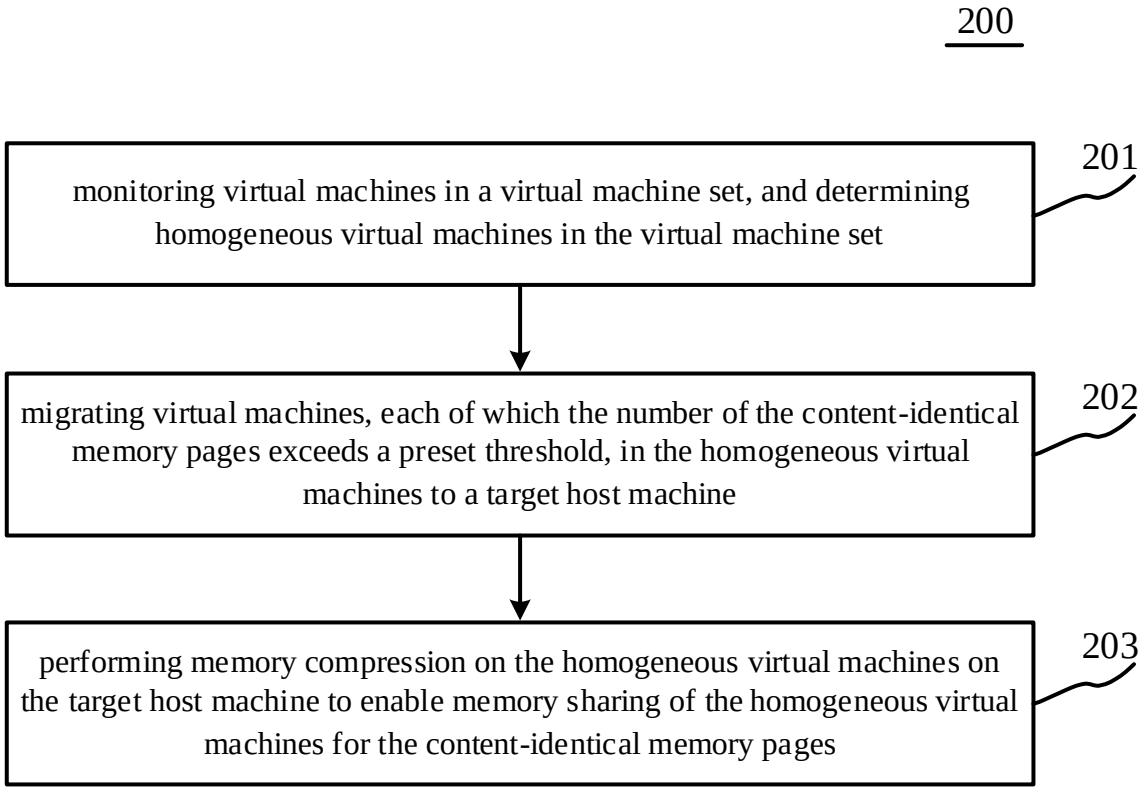

200
monitoring virtual machines in a virtual machine set, and determining homogeneous virtual machines in the virtual machine set
201
migrating virtual machines, each of which the number of the content-identical memory pages exceeds a preset threshold, in the homogeneous virtual machines to a target host machine
202
performing memory compression on the homogeneous virtual machines on the target host machine to enable memory sharing of the homogeneous virtual machines for the content-identical memory pages
203

Fig. 2

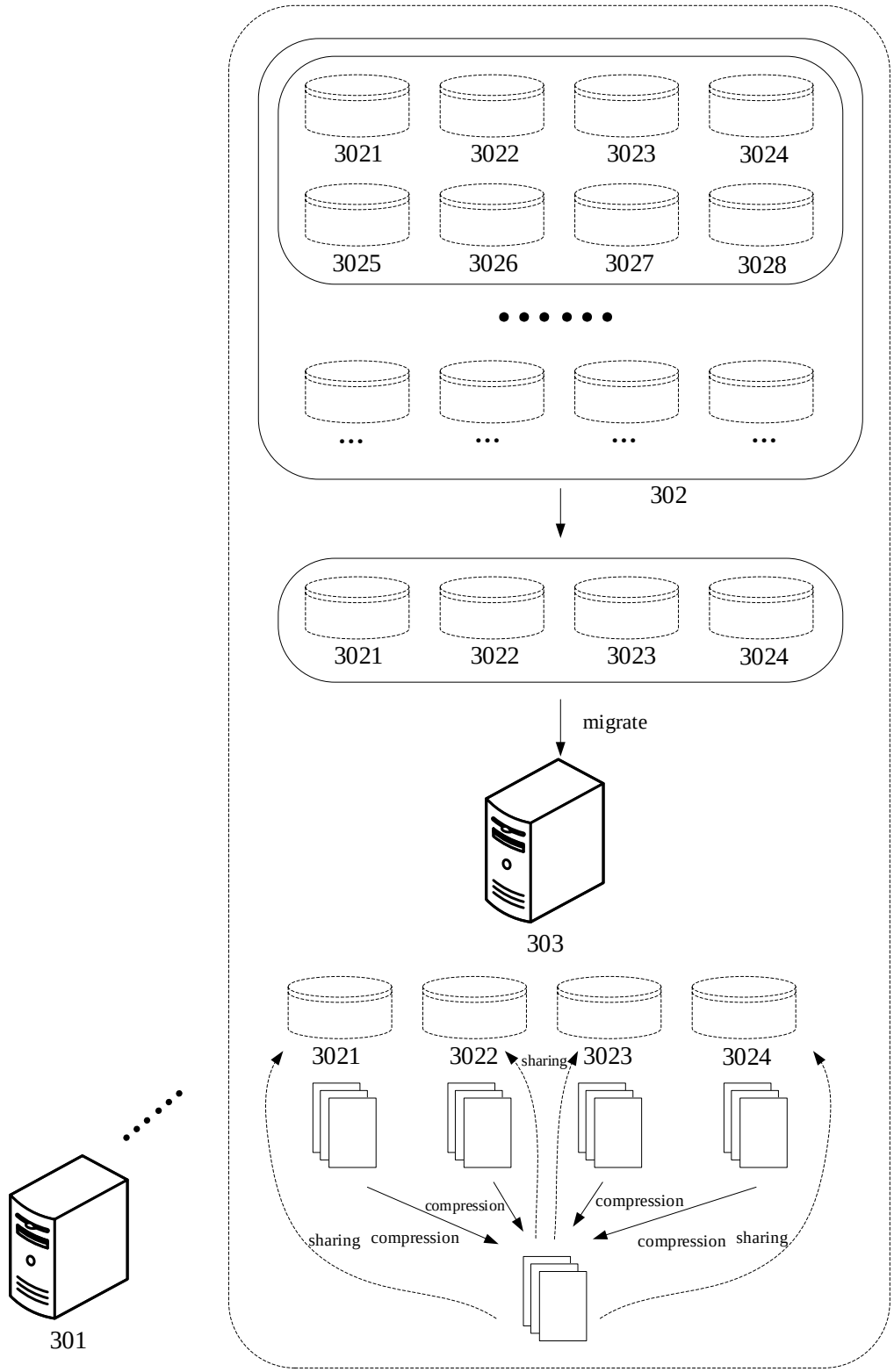

300
3021
3022
3023
3024
3025
3026
3027
3028
302
migrate
303
sharing
compression
301

Fig. 3

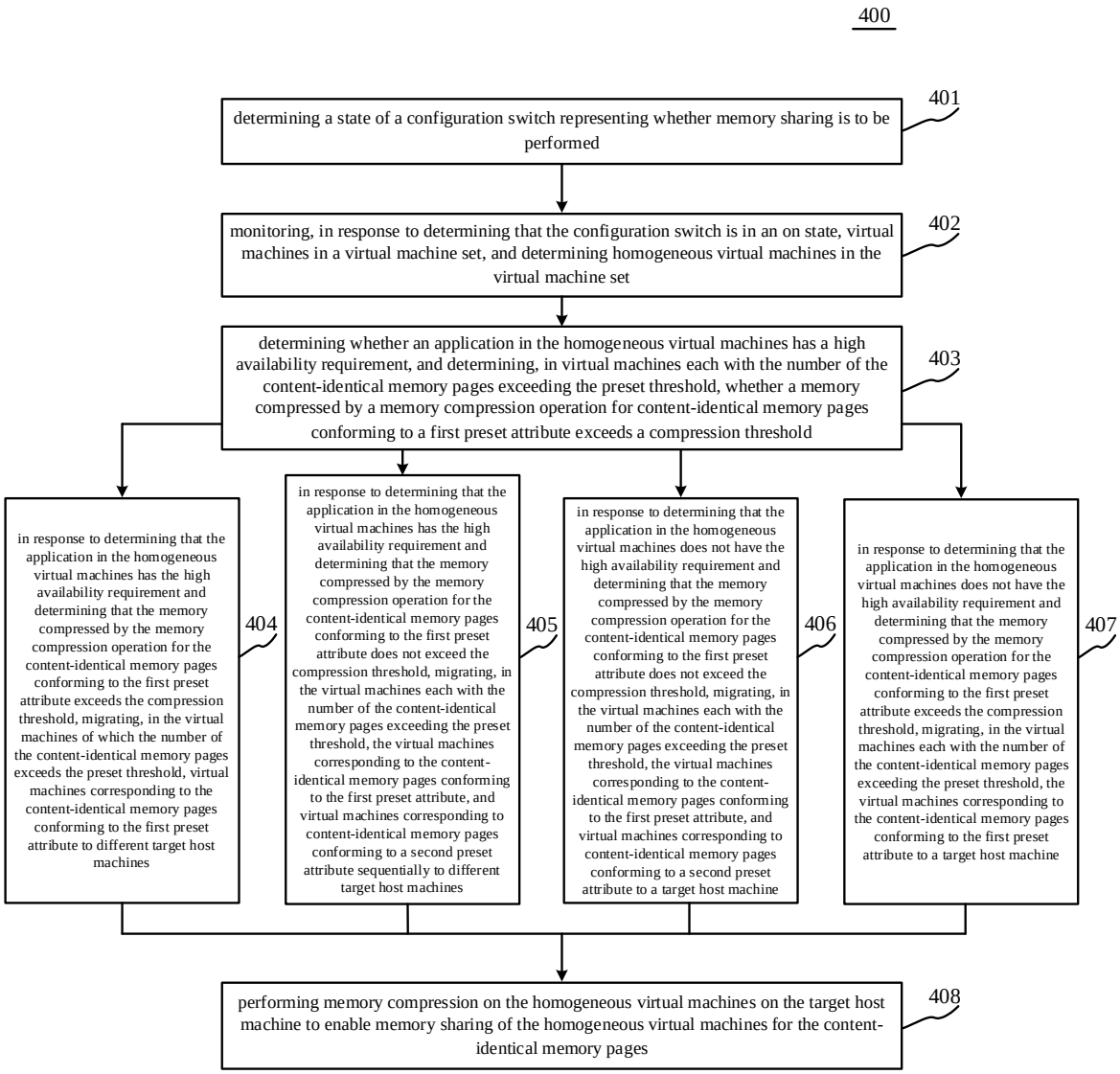

400
determining a state of a configuration switch representing whether memory sharing is to be performed
401
monitoring, in response to determining that the configuration switch is in an on state, virtual machines in a virtual machine set, and determining homogeneous virtual machines in the virtual machine set
402
determining whether an application in the homogeneous virtual machines has a high availability requirement, and determining, in virtual machines each with the number of the content-identical memory pages exceeding the preset threshold, whether a memory compressed by a memory compression operation for content-identical memory pages conforming to a first preset attribute exceeds a compression threshold
403
in response to determining that the application in the homogeneous virtual machines has the high availability requirement and determining that the memory compressed by the memory compression operation for the content-identical memory pages conforming to the first preset attribute exceeds the compression threshold, migrating, in the virtual machines of which the number of the content-identical memory pages exceeds the preset threshold, virtual machines corresponding to the content-identical memory pages conforming to the first preset attribute to different target host machines
404
in response to determining that the application in the homogeneous virtual machines has the high availability requirement and determining that the memory compressed by the memory compression operation for the content-identical memory pages conforming to the first preset attribute does not exceed the compression threshold, migrating, in the virtual machines each with the number of the content-identical memory pages exceeding the preset threshold, the virtual machines corresponding to the content-identical memory pages conforming to the first preset attribute, and virtual machines corresponding to content-identical memory pages conforming to a second preset attribute sequentially to different target host machines
405
in response to determining that the application in the homogeneous virtual machines does not have the high availability requirement and determining that the memory compressed by the memory compression operation for the content-identical memory pages conforming to the first preset attribute does not exceed the compression threshold, migrating, in the virtual machines each with the number of the content-identical memory pages exceeding the preset threshold, the virtual machines corresponding to the content-identical memory pages conforming to the first preset attribute, and virtual machines corresponding to content-identical memory pages conforming to a second preset attribute to a target host machine
406
in response to determining that the application in the homogeneous virtual machines does not have the high availability requirement and determining that the memory compressed by the memory compression operation for the content-identical memory pages conforming to the first preset attribute exceeds the compression threshold, migrating, in the virtual machines each with the number of the content-identical memory pages exceeding the preset threshold, the virtual machines corresponding to the content-identical memory pages conforming to the first preset attribute to a target host machine
407
performing memory compression on the homogeneous virtual machines on the target host machine to enable memory sharing of the homogeneous virtual machines for the content-identical memory pages
408

Fig. 4

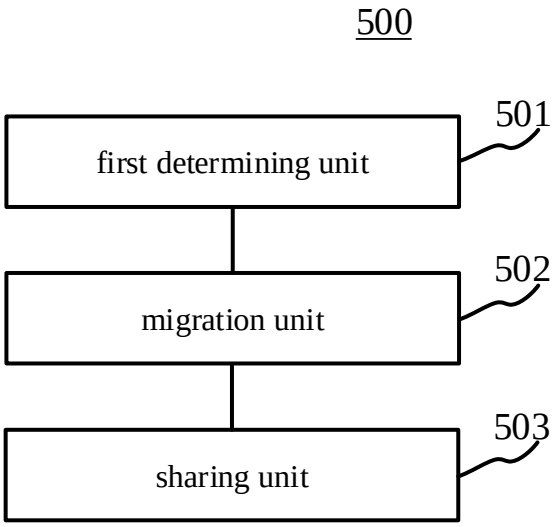

500
501
first determining unit
502
migration unit
503
sharing unit

Fig. 5

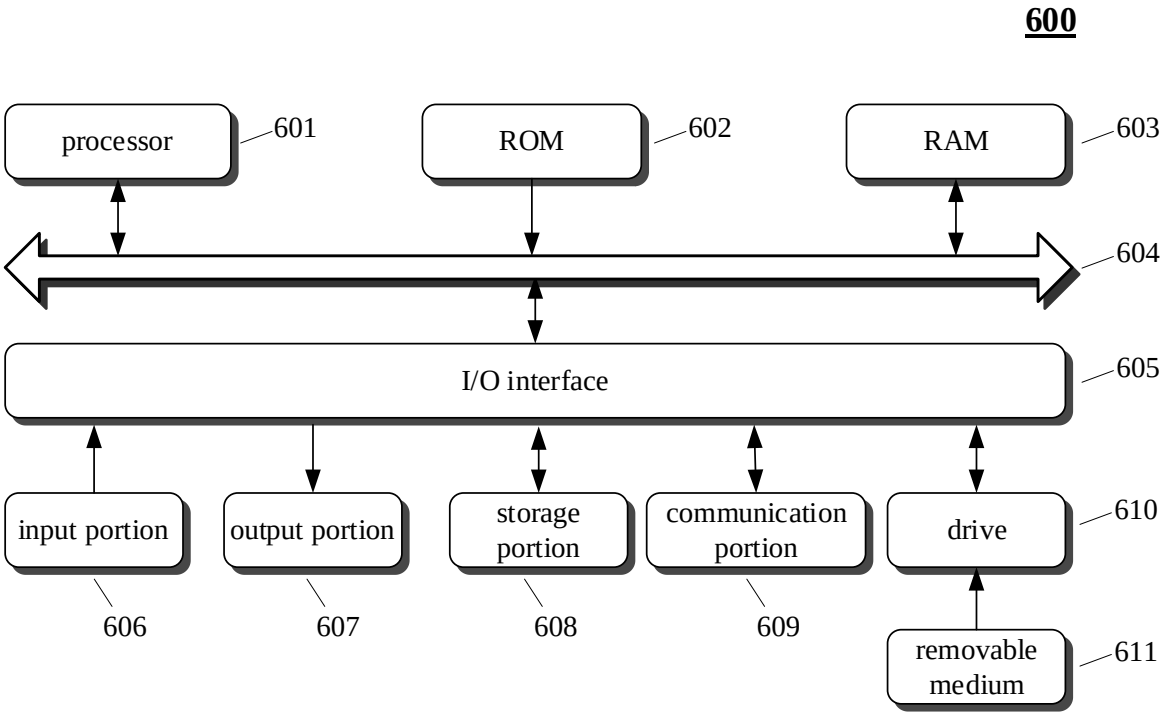

600
processor
601
ROM
602
RAM
603
604
I/O interface
605
input portion
output portion
storage portion
communication portion
drive
610
606
607
608
609
removable medium
611

Fig. 6