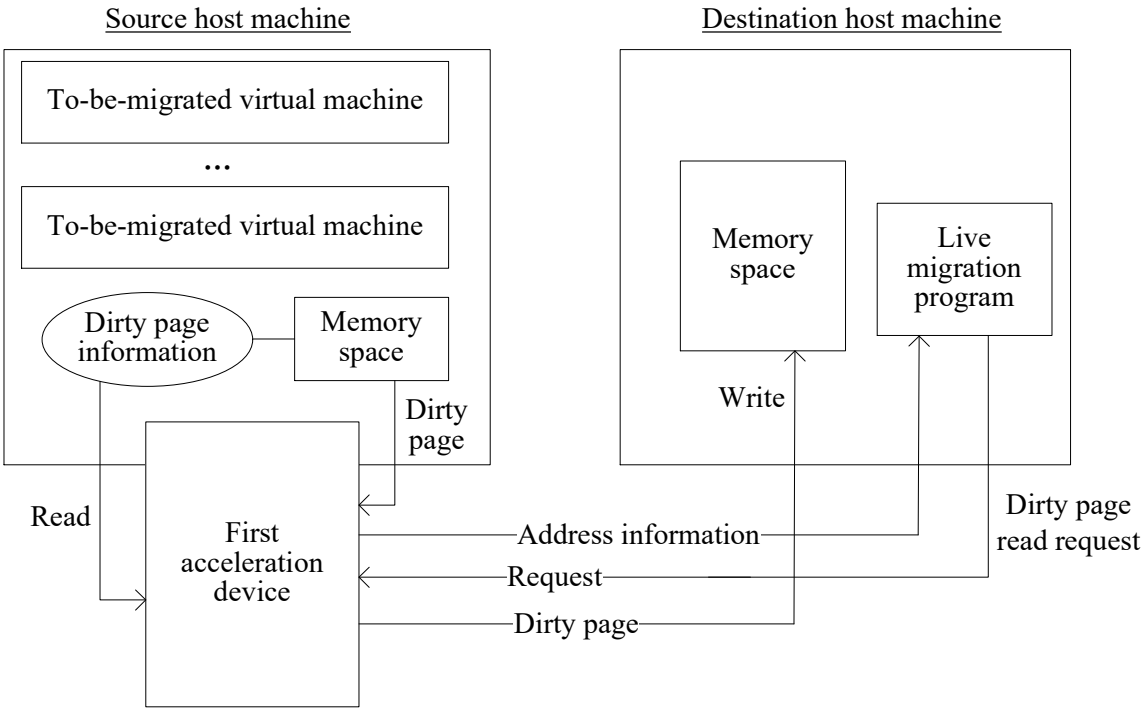

Source host machine
Destination host machine
To-be-migrated virtual machine
...
To-be-migrated virtual machine
Dirty page information
Memory space
Dirty page
Memory space
Live migration program
Write
Read
First acceleration device
Address information
Request
Dirty page
Dirty page read request

FIG. 1a

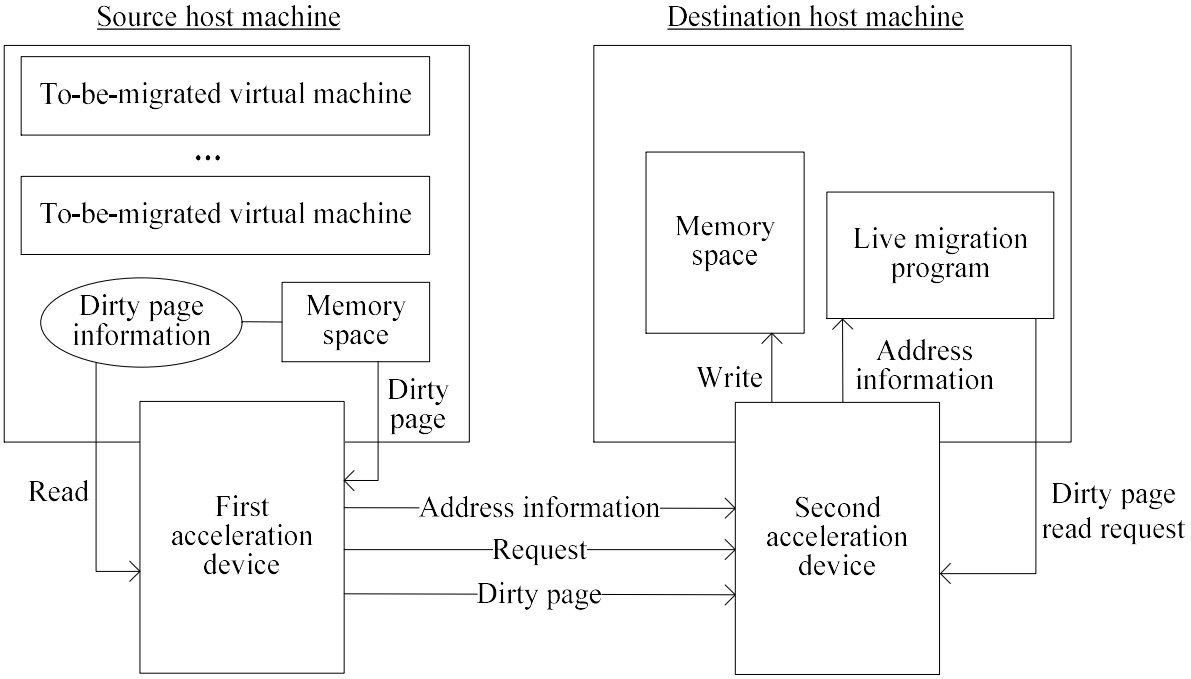

Source host machine
Destination host machine
To-be-migrated virtual machine
...
To-be-migrated virtual machine
Dirty page information
Memory space
Dirty page
Memory space
Live migration program
Write
Address information
Read
First acceleration device
Address information
Request
Dirty page
Second acceleration device
Dirty page read request

FIG. 1b

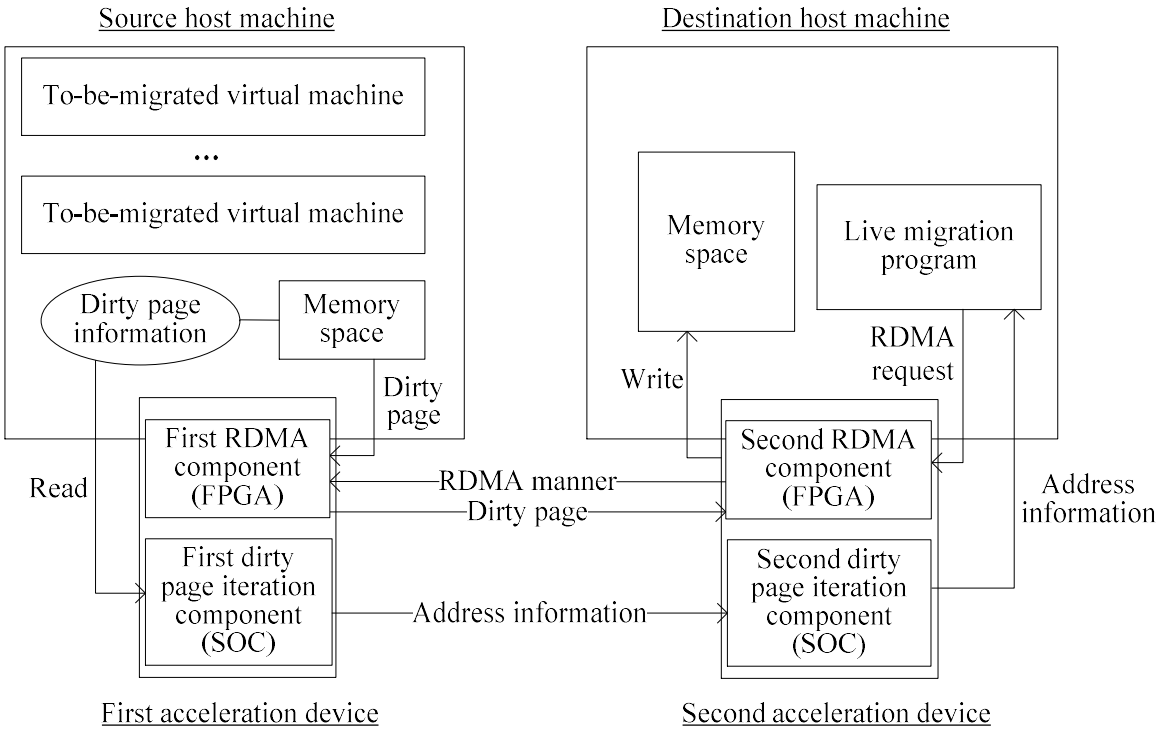

Source host machine
Destination host machine
To-be-migrated virtual machine
...
To-be-migrated virtual machine
Dirty page information
Memory space
Dirty page
Memory space
Live migration program
RDMA request
Write
First RDMA component (FPGA)
Second RDMA component (FPGA)
Read
RDMA manner
Dirty page
Address information
First dirty page iteration component (SOC)
Address information
Second dirty page iteration component (SOC)
First acceleration device
Second acceleration device

FIG. 2

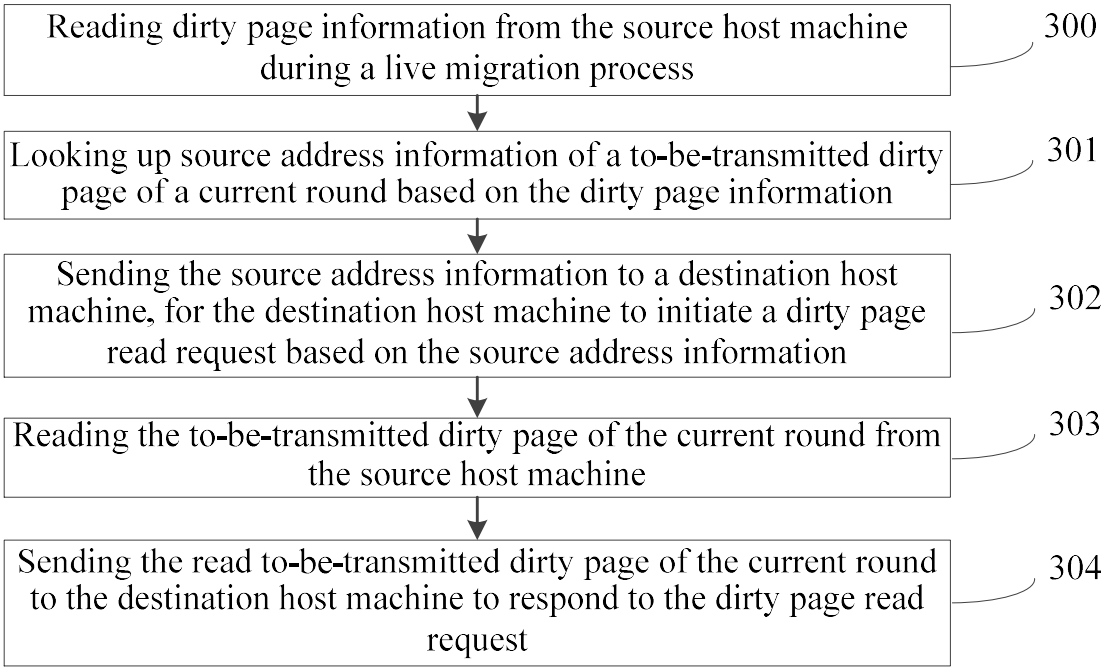

Reading dirty page information from the source host machine during a live migration process
300
Looking up source address information of a to-be-transmitted dirty page of a current round based on the dirty page information
301
Sending the source address information to a destination host machine, for the destination host machine to initiate a dirty page read request based on the source address information
302
Reading the to-be-transmitted dirty page of the current round from the source host machine
303
Sending the read to-be-transmitted dirty page of the current round to the destination host machine to respond to the dirty page read request
304

FIG. 3

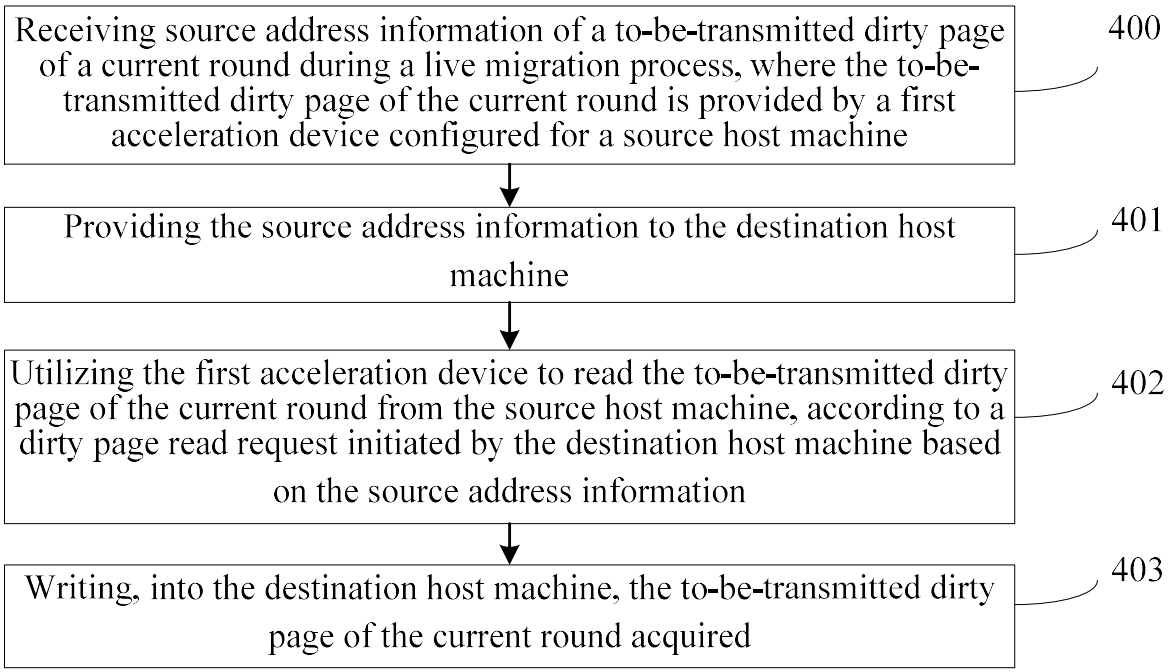


FIG. 4



FIG. 5



FIG. 6