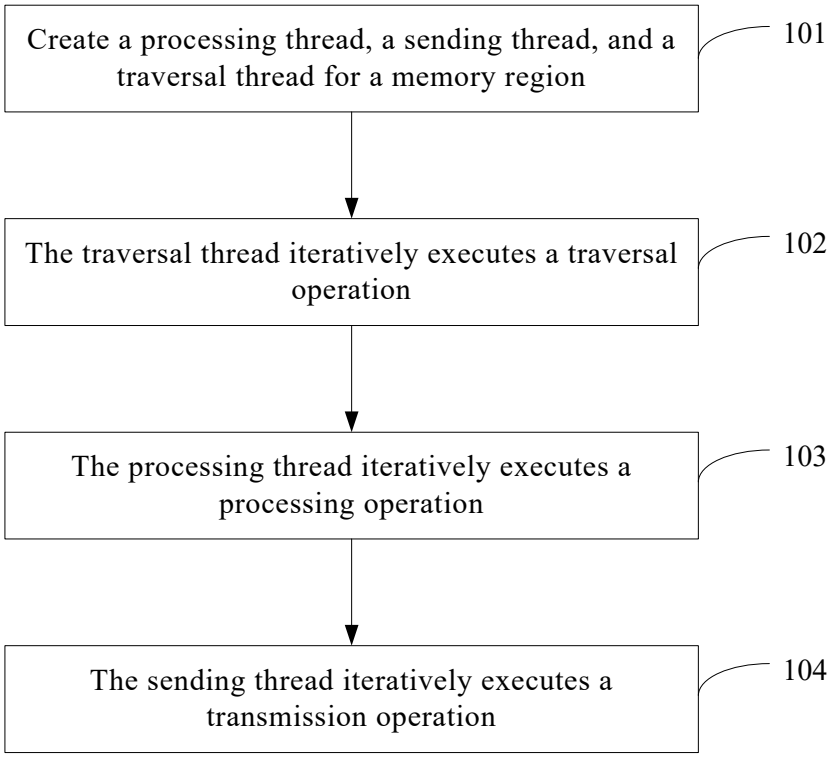
Create a processing thread, a sending thread, and a traversal thread for a memory region
101
The traversal thread iteratively executes a traversal operation
102
The processing thread iteratively executes a processing operation
103
The sending thread iteratively executes a transmission operation
104

FIG. 1

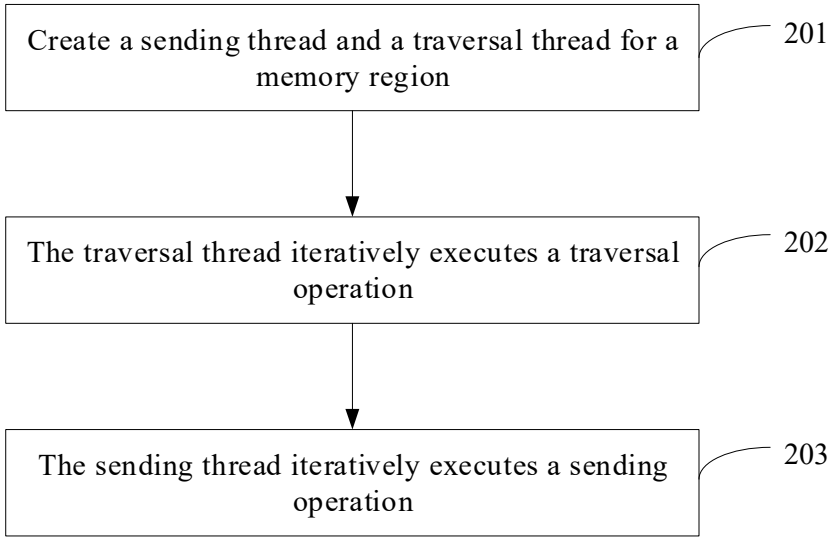
Create a sending thread and a traversal thread for a memory region
201
The traversal thread iteratively executes a traversal operation
202
The sending thread iteratively executes a sending operation
203

FIG. 2

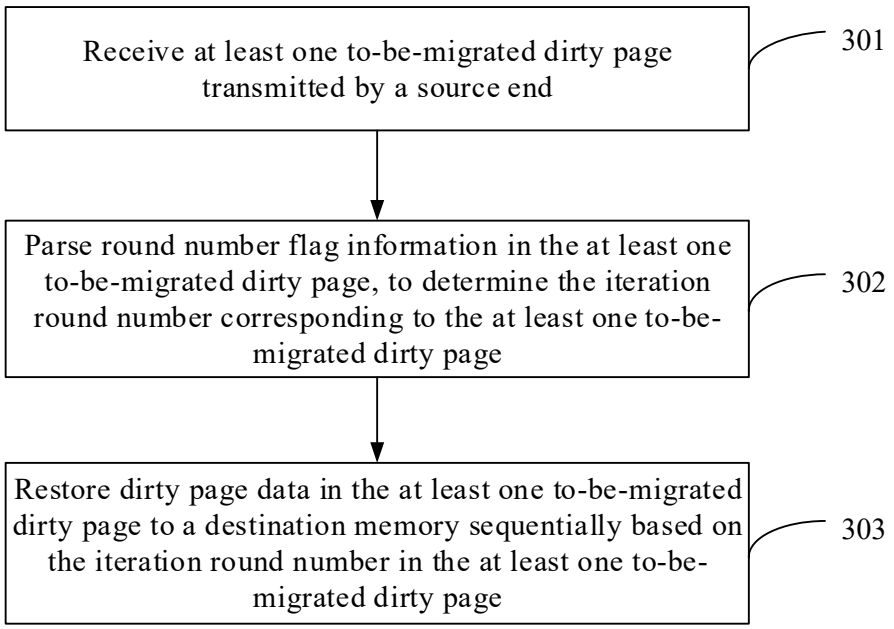
Receive at least one to-be-migrated dirty page transmitted by a source end
301
Parse round number flag information in the at least one to-be-migrated dirty page, to determine the iteration round number corresponding to the at least one to-be-migrated dirty page
302
Restore dirty page data in the at least one to-be-migrated dirty page to a destination memory sequentially based on the iteration round number in the at least one to-be-migrated dirty page
303

FIG. 3

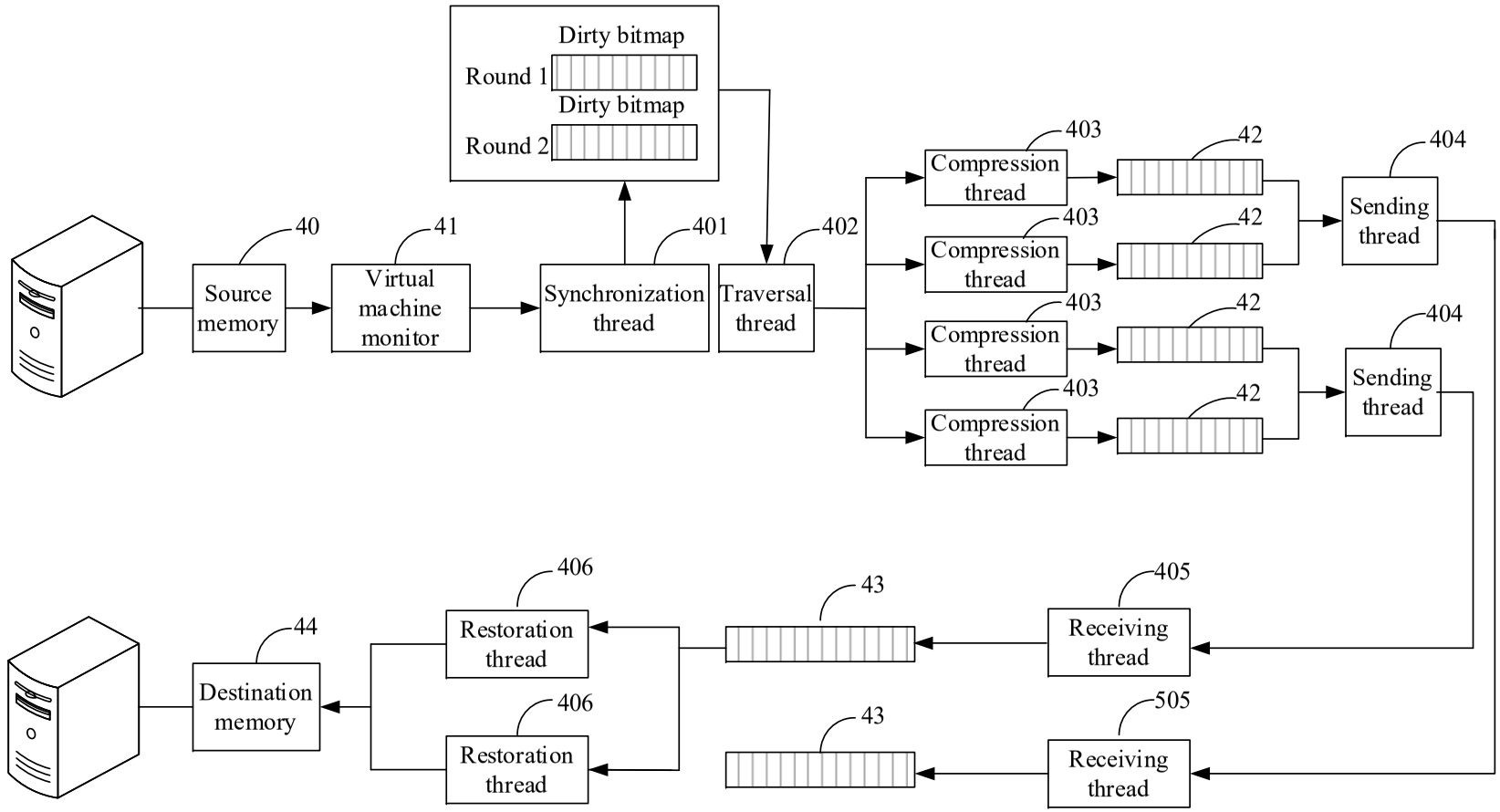
Dirty bitmap
Round 1
Dirty bitmap
Round 2
40
Source memory
41
Virtual machine monitor
401
Synchronization thread
402
Traversal thread
403
Compression thread
42
404
Sending thread
405
Receiving thread
505
Receiving thread
43
406
Restoration thread
44
Destination memory

FIG. 4

t0	t1	t2	t3	t4	t5	t6	t7
Synchronization operation in round 1	Traversal operation in round 1	Compression operation in round 1	Sending operation in round 1				
	Synchronization operation in round 2	Traversal operation in round 2	Compression operation in round 2	Sending operation in round 2			
		Synchronization operation in round 3	Traversal operation in round 3	Compression operation in round 3	Sending operation in round 3		
			Synchronization operation in round 4	Traversal operation in round 4	Compression operation in round 4	Sending operation in round 4	
				Synchronization operation in round 5	Traversal operation in round 5	Compression operation in round 5	Sending operation in round 5

FIG. 5

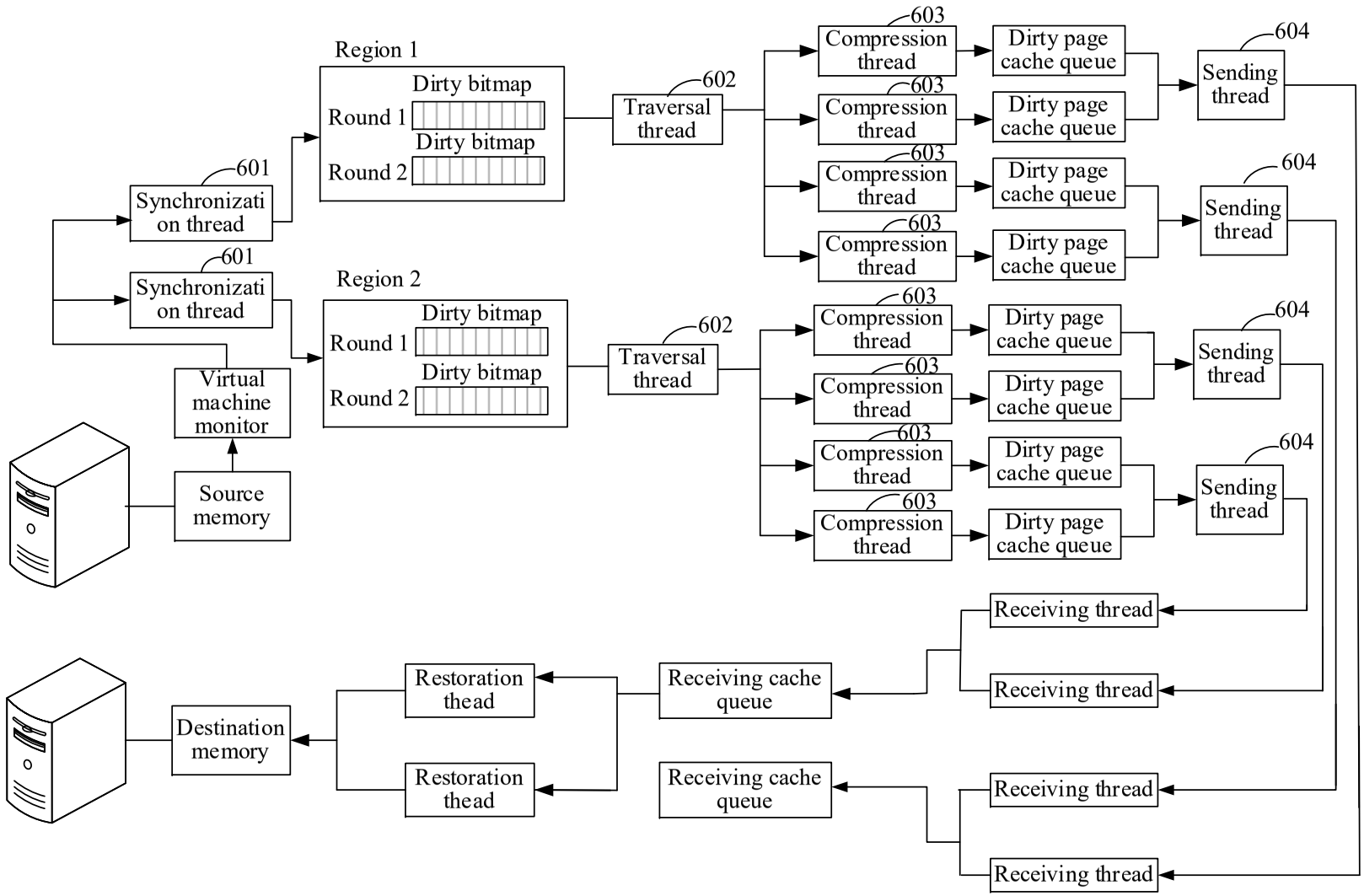
Region 1
Dirty bitmap
Round 1
Dirty bitmap
Round 2
Region 2
Dirty bitmap
Round 1
Dirty bitmap
Round 2
601
Synchronization thread
601
Synchronization thread
Virtual machine monitor
Source memory
602
Traversal thread
602
Traversal thread
603
Compression thread
Dirty page cache queue
604
Sending thread
Receiving thread
Receiving cache queue
Restoration thead
Destination memory

FIG. 6

	t0	t1	t2	t3	t4	t5	t6	t7
Region 1	Synchronization operation in round 1	Traversal operation in round 1	Compression operation in round 1	Sending operation in round 1				
Region 2	Synchronization operation in round 1	Traversal operation in round 1	Compression operation in round 1	Sending operation in round 1				
Region 1		Synchronization operation in round 2	Traversal operation in round 2	Compression operation in round 2	Sending operation in round 2			
Region 2		Synchronization operation im round 2	Traversal operation in round 2	Compression operation in round 2	Sending operation in round 2			
Region 1			Synchronization operation in round 3	Traversal operation in round 3	Compression operation in round 3	Sending operation in round 3		
Region 2			Synchronization operation im round 3	Traversal operation in round 3	Compression operation in round 3	Sending operation in round 3		
Region 1				Synchronization operation in round 4	Traversal operation in round 4	Compression operation in round 4	Sending operation in round 4	
Region 2				Synchronization operation in round 4	Traversal operation in round 4	Compression operation in round 4	Sending operation in round 4	
Region 1					Synchronization operation in round 5	Traversal operation in round 5	Compression operation in round 5	Sending operation in round 5
Region 2					Synchronization operation in round 5	Traversal operation in round 5	Compression operation in round 5	Sending operation in round 5

FIG. 7

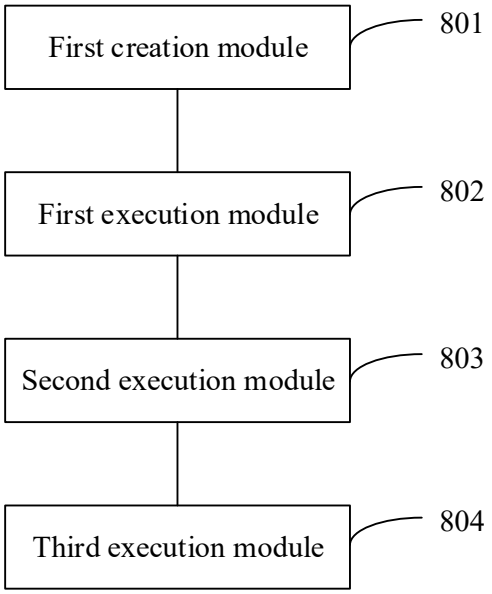
First creation module
801
First execution module
802
Second execution module
803
Third execution module
804

FIG. 8

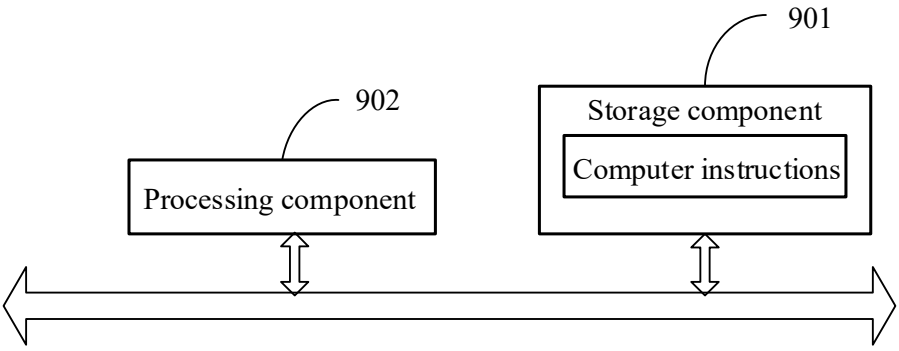
901
902
Storage component
Computer instructions
Processing component

FIG. 9

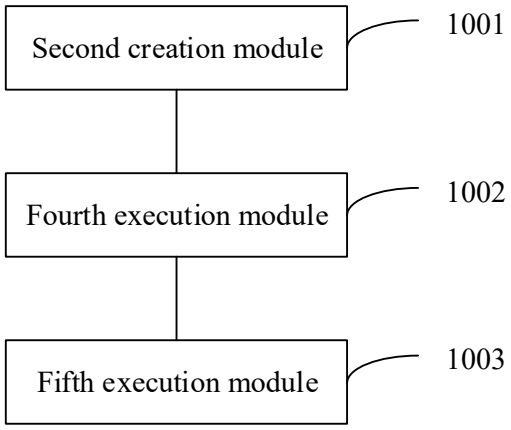
Second creation module
1001
Fourth execution module
1002
Fifth execution module
1003

FIG. 10

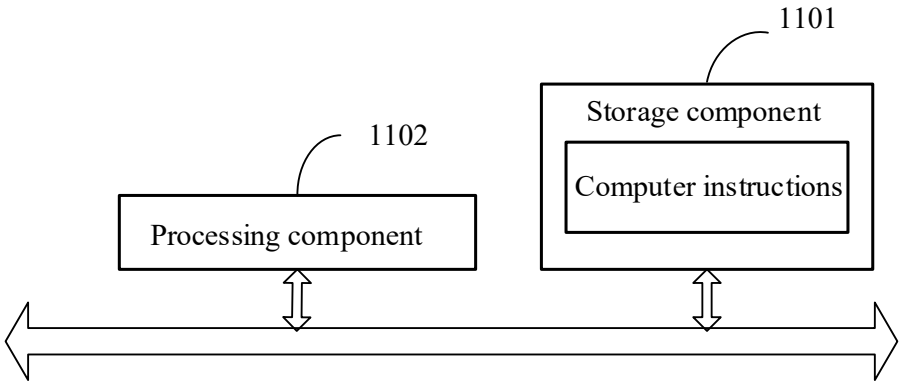
1101
Storage component
Computer instructions
1102
Processing component

FIG. 11

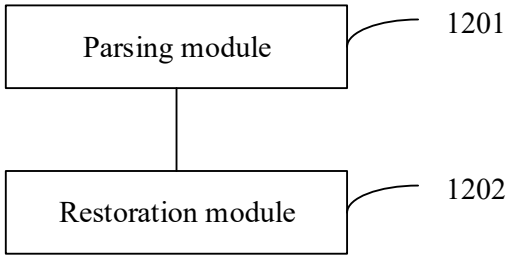
Parsing module
1201
Restoration module
1202

FIG. 12

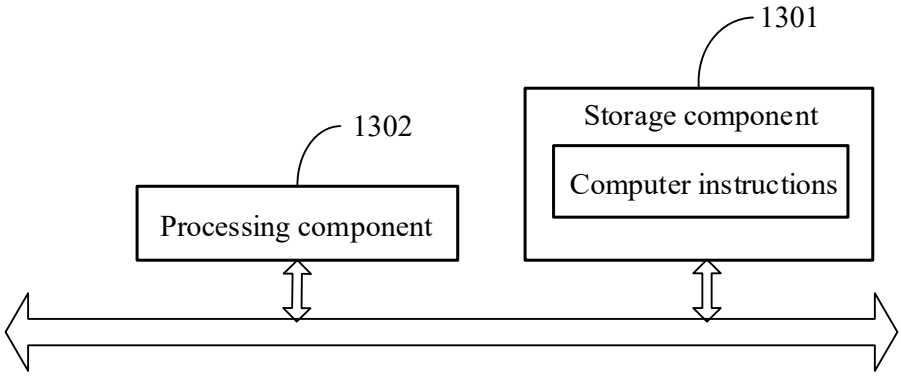
1301
Storage component
Computer instructions
1302
Processing component

FIG. 13