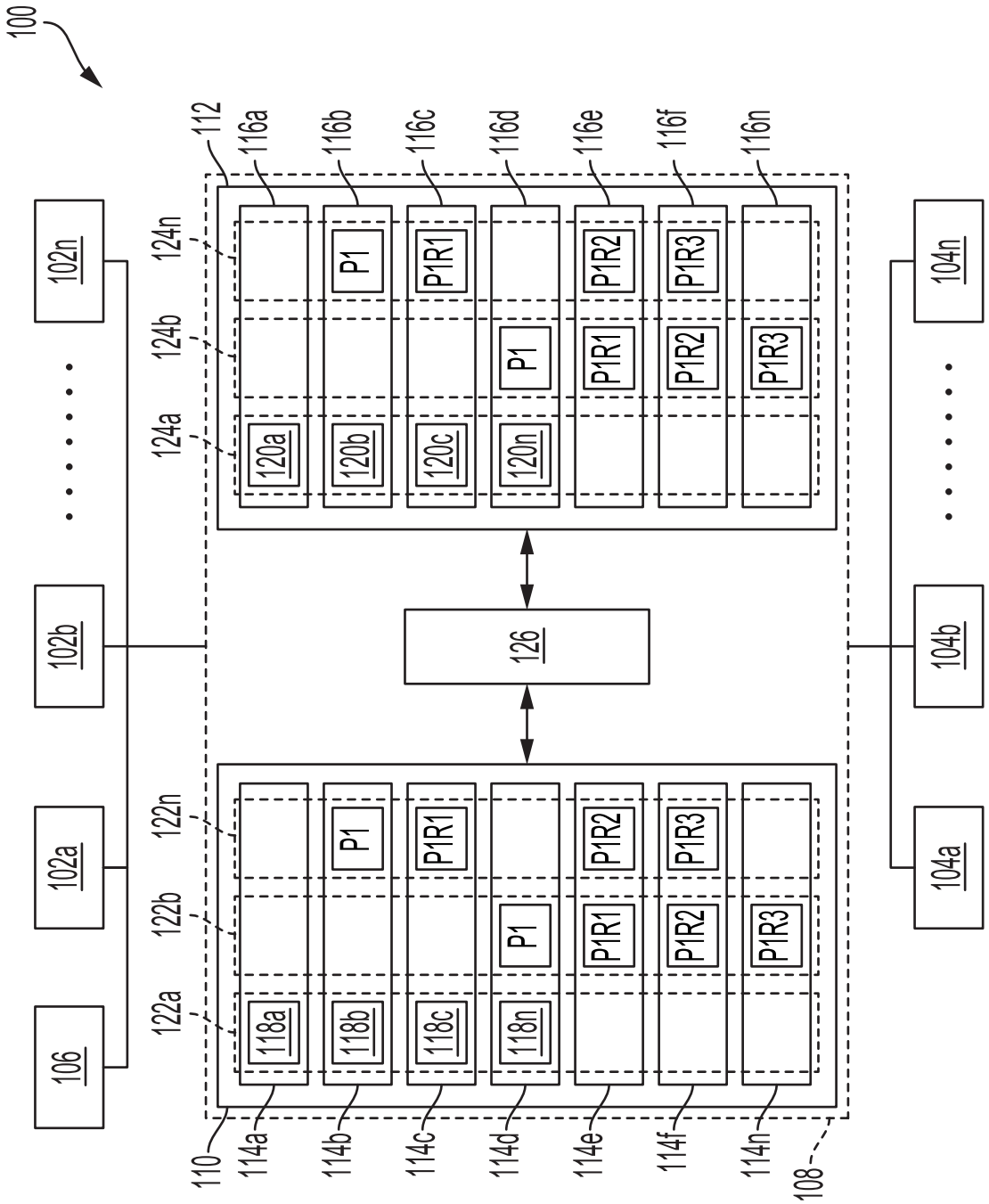

100
112
116a
116b
116c
116d
116e
116f
116n
124n
124b
124a
120a
120b
120c
120n
P1
P1R1
P1R2
P1R3
102n
102b
102a
106
126
104n
104b
104a
122n
122b
122a
118a
118b
118c
118n
110
114a
114b
114c
114d
114e
114f
114n
108

FIG. 1

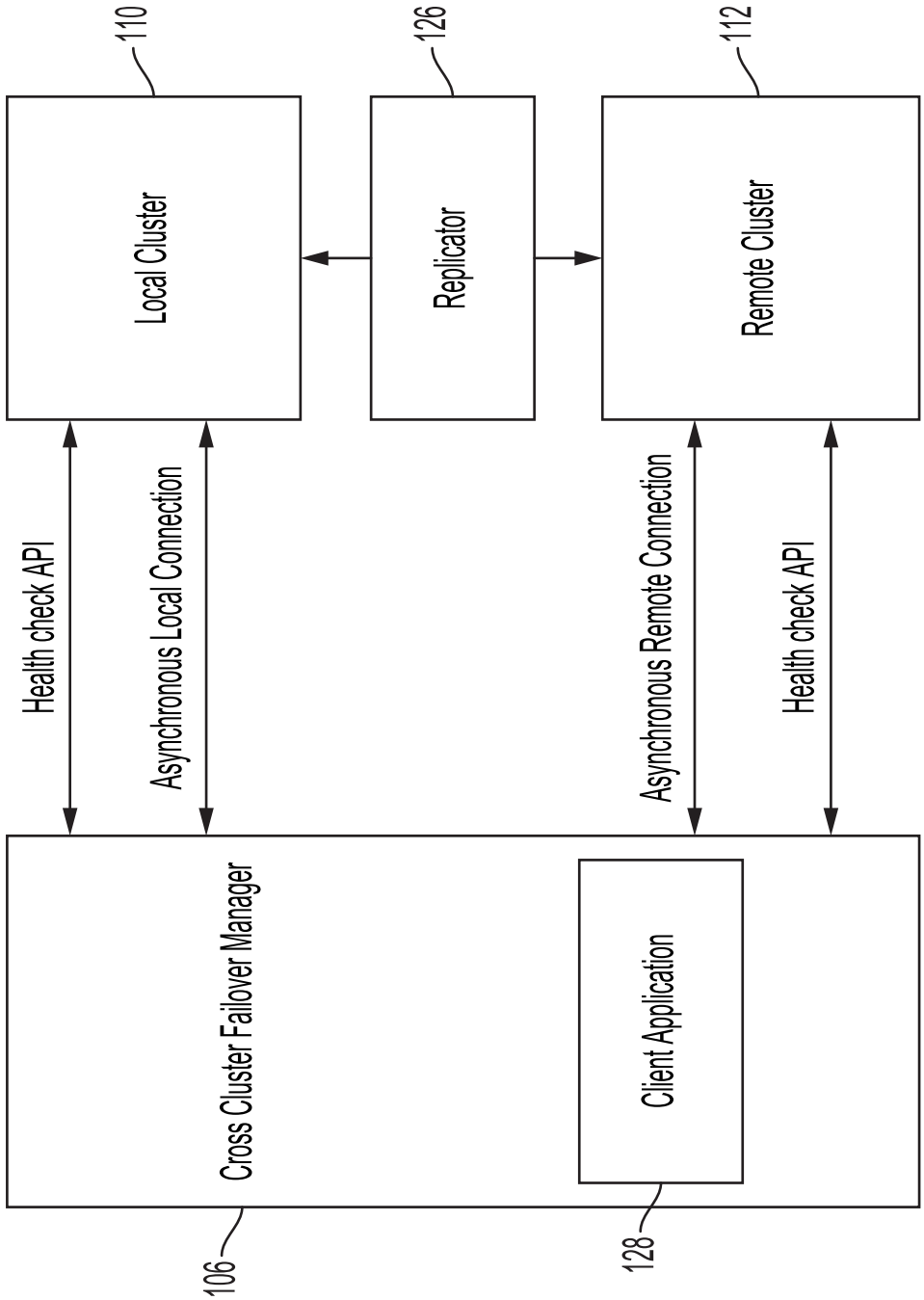

110
126
112
Local Cluster
Replicator
Remote Cluster
Health check API
Asynchronous Local Connection
Asynchronous Remote Connection
Health check API
Cross Cluster Failover Manager
Client Application
106
128

FIG. 2

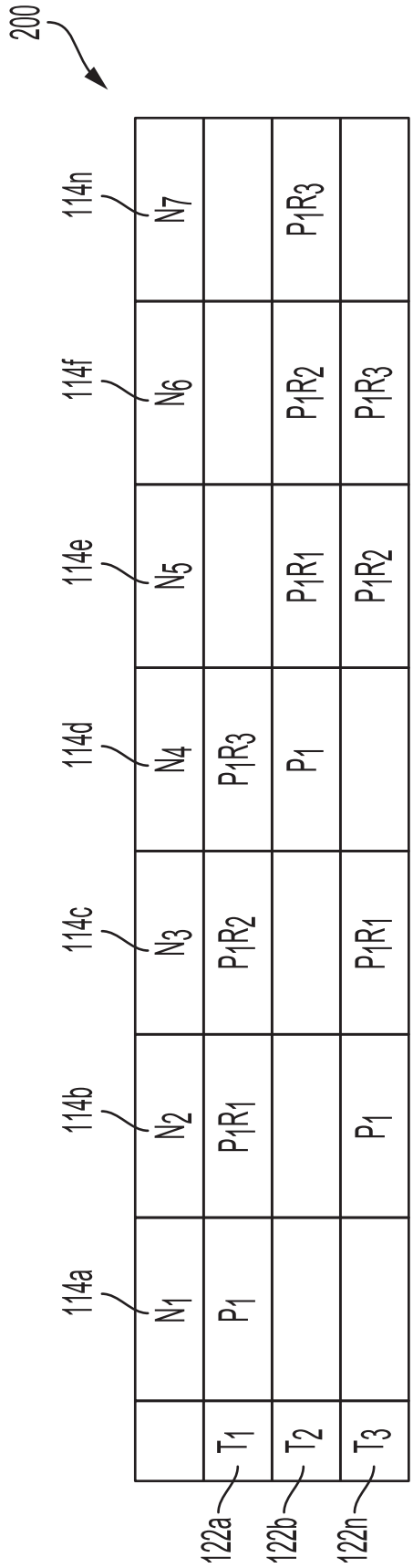

200
114a
114b
114c
114d
114e
114f
114n
N1
N2
N3
N4
N5
N6
N7
P1
P1R1
P1R2
P1R3
P1
P1R1
P1R2
P1R3
T1
T2
T3
122a
122b
122n

FIG. 3

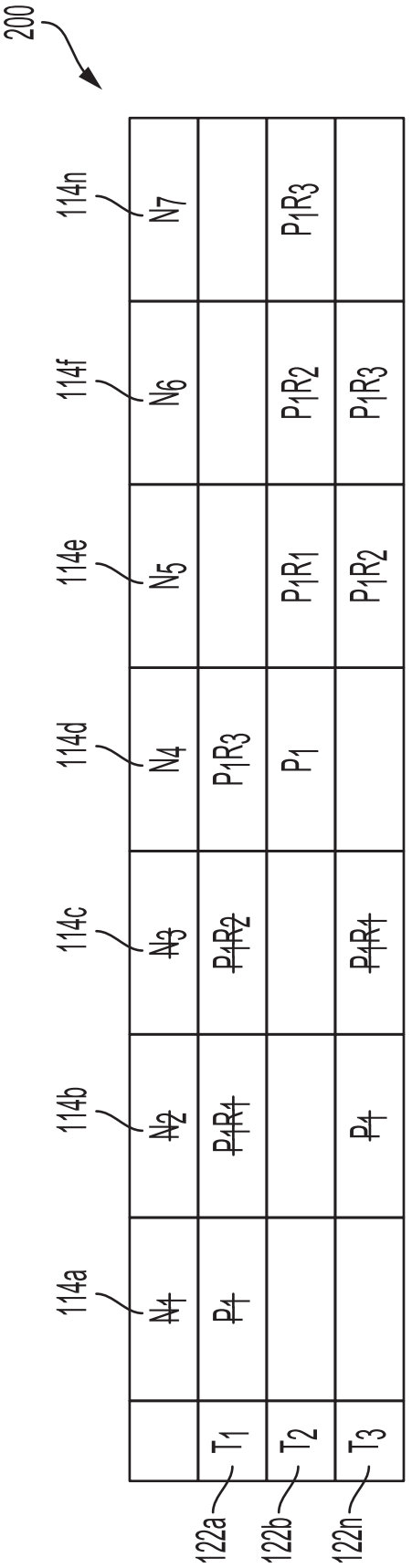

200
114a
114b
114c
114d
114e
114f
114n
N1
N2
N3
N4
N5
N6
N7
P1
P1R1
P1R2
P1R3
P1
P1R1
P1R2
P1R3
T1
T2
T3
122a
122b
122n

FIG. 4

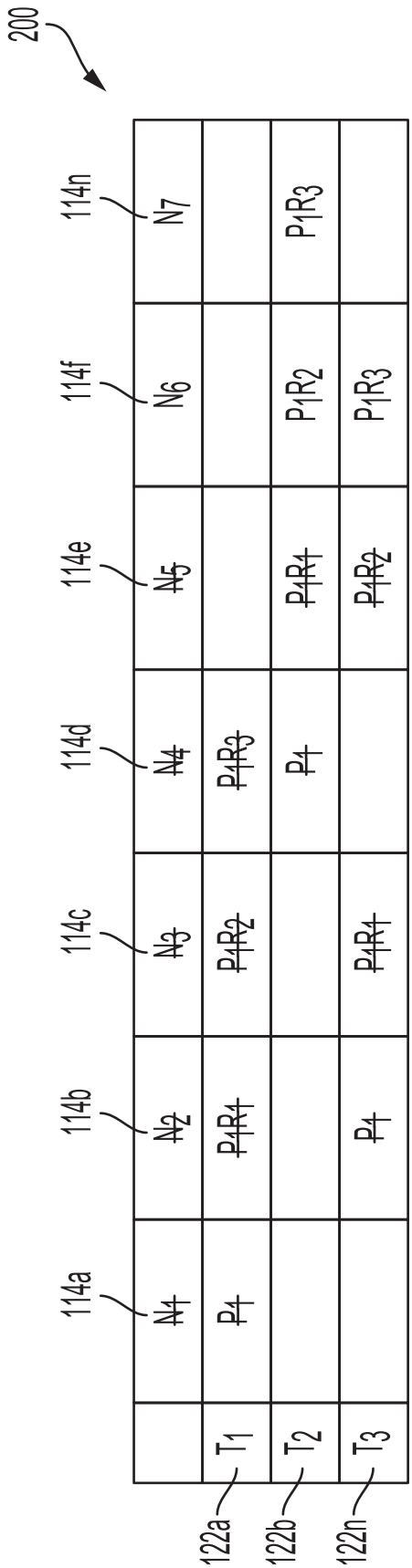

200
114a
114b
114c
114d
114e
114f
114n
N4
N2
N3
N4
N5
N6
N7
P4
P1R4
P1R2
P1R3
P4
P1R2
P1R3
P4
P1R4
P4
P1R4
T1
T2
T3
122a
122b
122n

FIG. 5

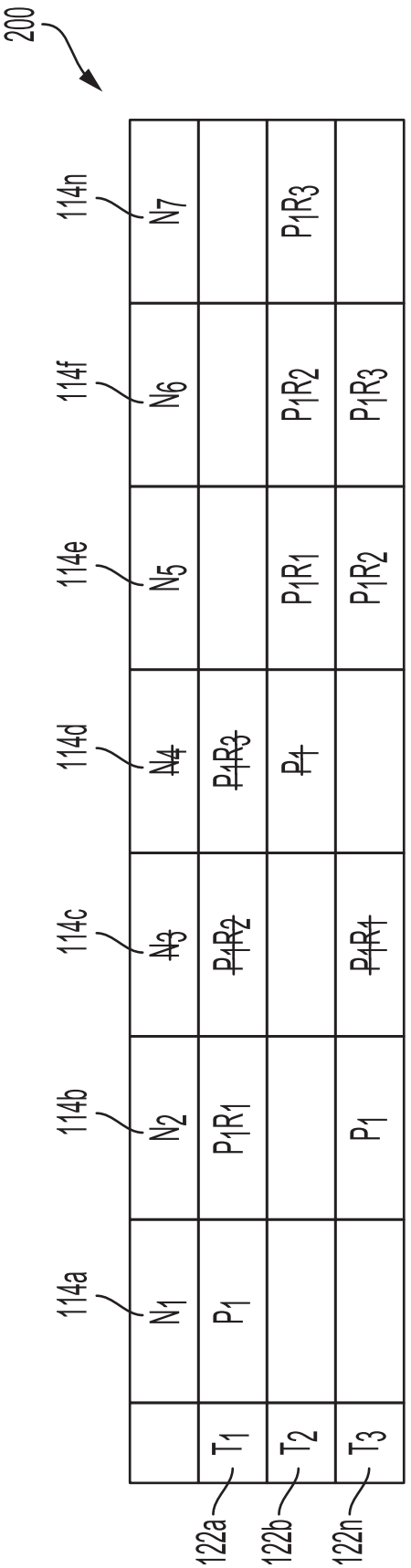

200
114a
114b
114c
114d
114e
114f
114n
N1
N2
N3
N4
N5
N6
N7
P1
P1R1
P1R2
P1R3
P1R1
P1R2
P1R3
P1
P1R4
T1
T2
T3
122a
122b
122n

FIG. 6

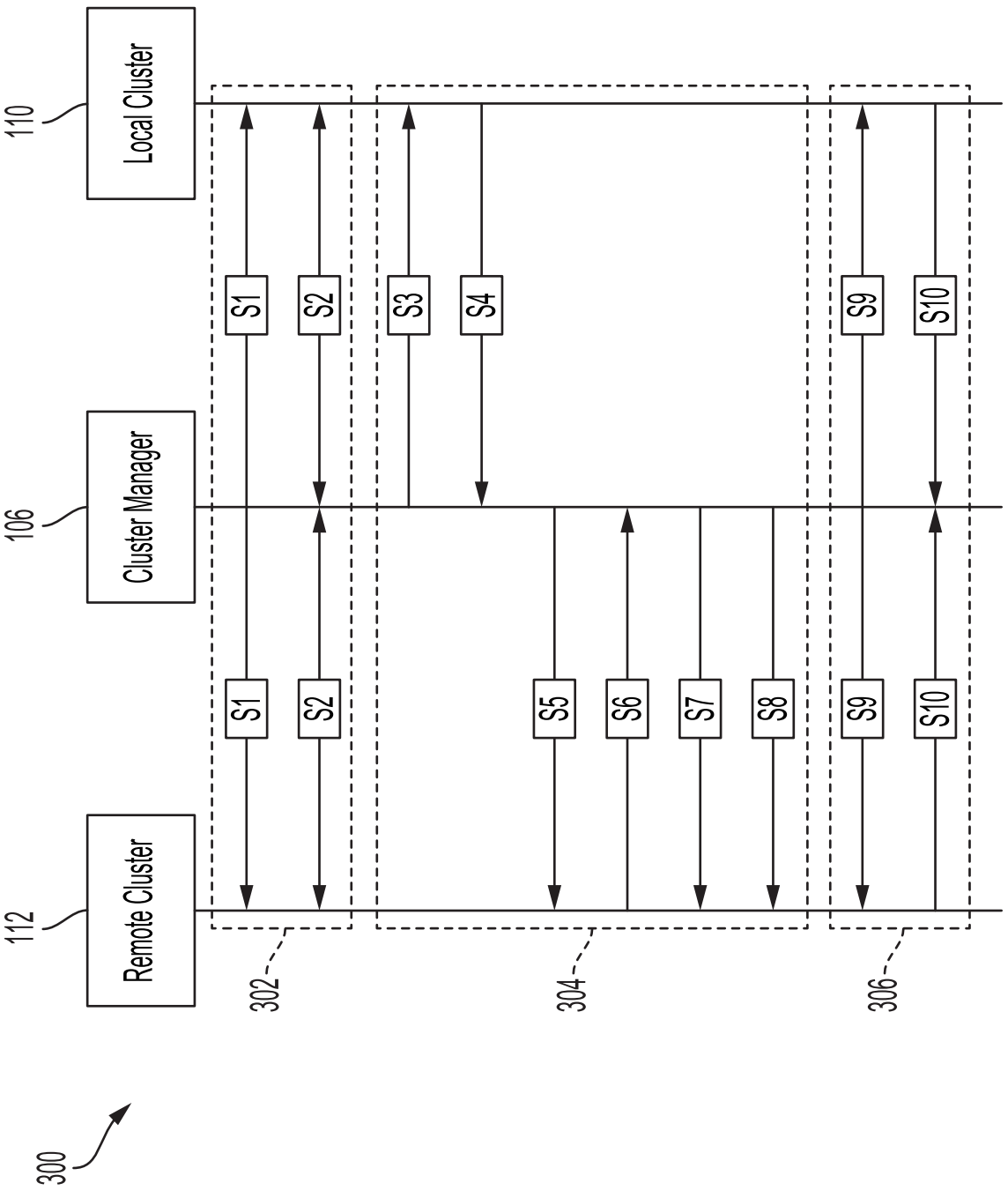

300
110
Local Cluster
106
Cluster Manager
112
Remote Cluster
S1
S2
S3
S4
S1
S2
S5
S6
S7
S8
S9
S10
S9
S10
302
304
306

FIG. 7

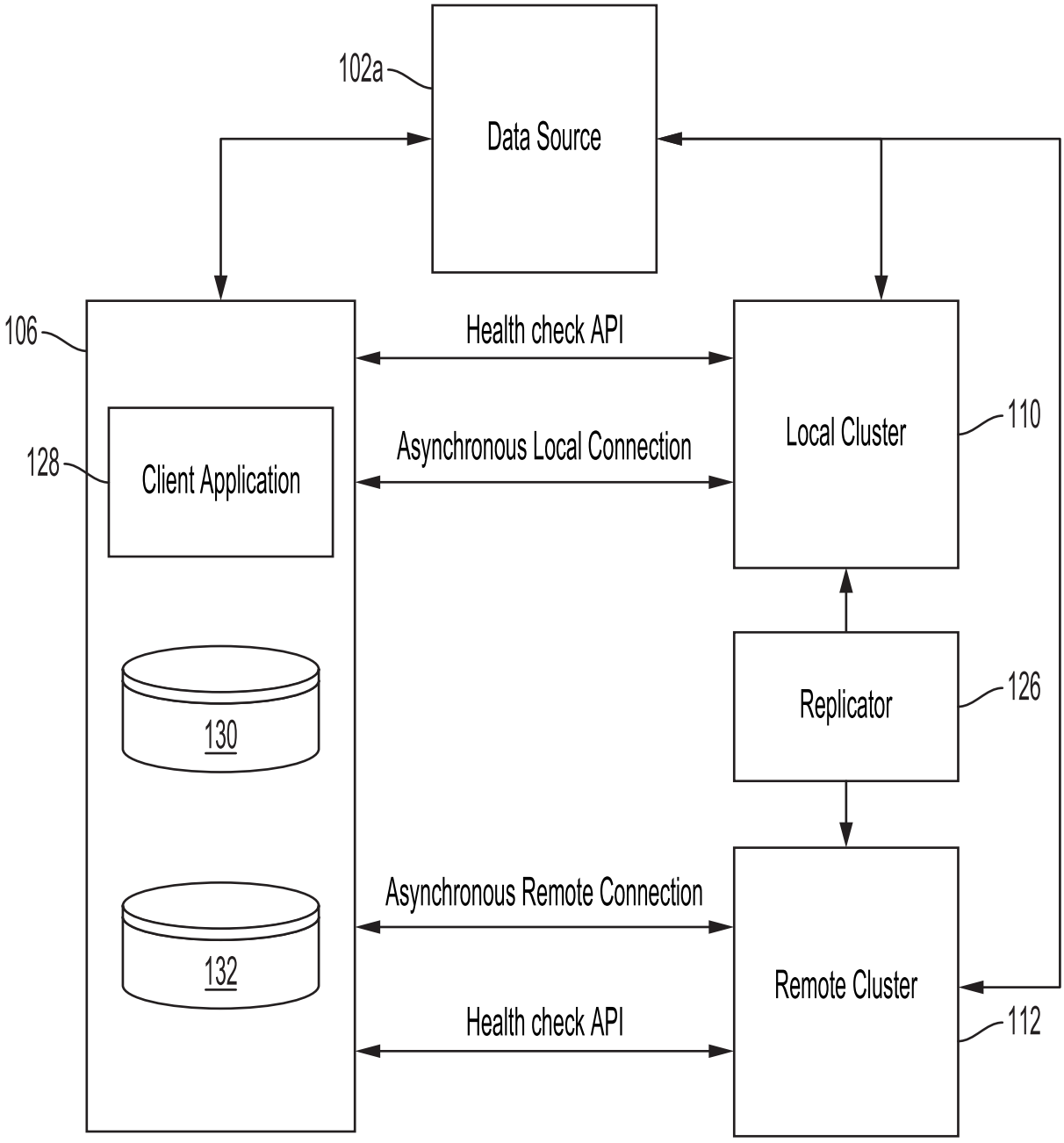

102a
Data Source
106
Health check API
Local Cluster
110
128
Client Application
Asynchronous Local Connection
130
Replicator
126
132
Asynchronous Remote Connection
Remote Cluster
Health check API
112

FIG. 8

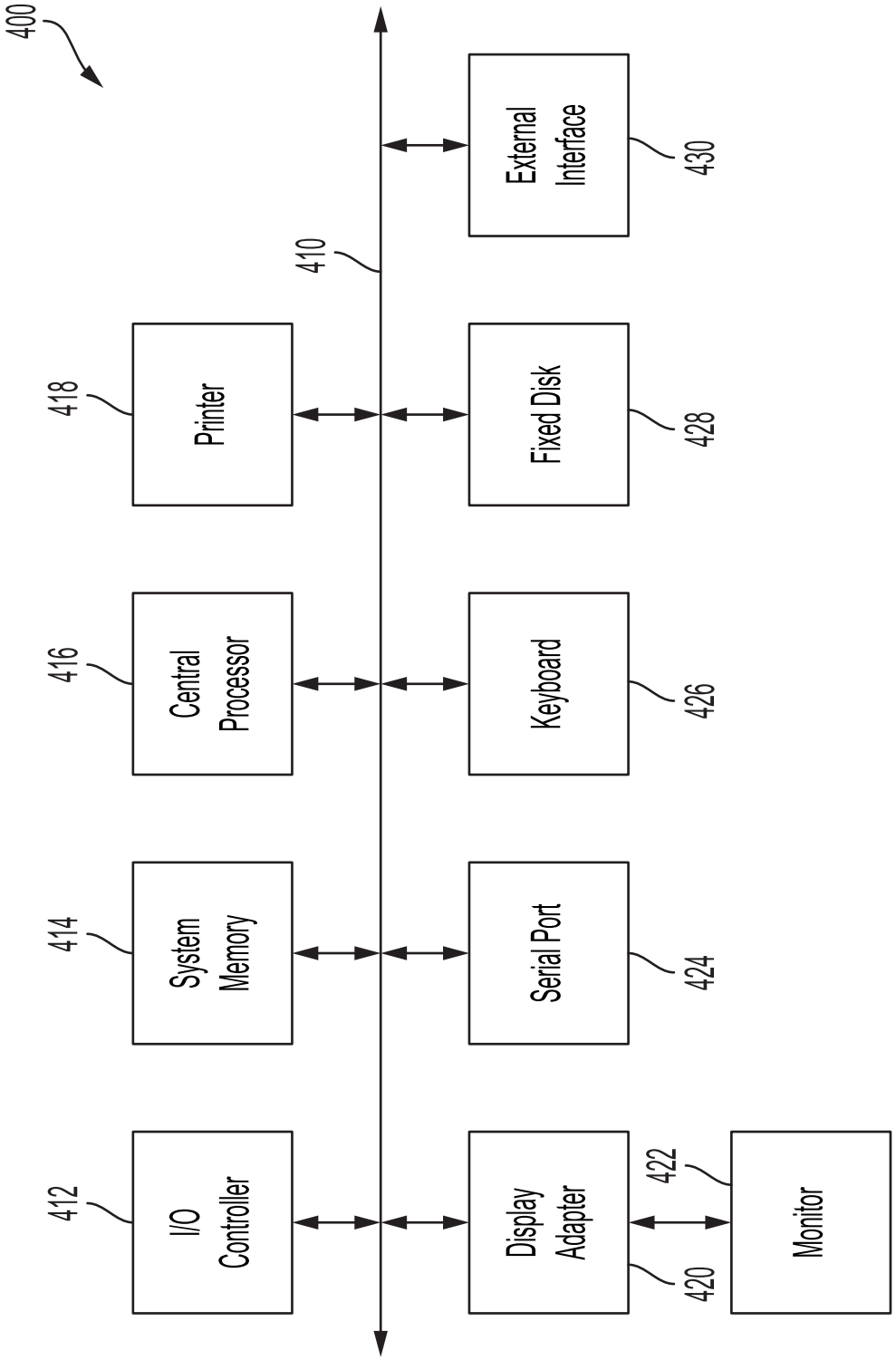

400
410
412
I/O Controller
414
System Memory
416
Central Processor
418
Printer
420
Display Adapter
422
Monitor
424
Serial Port
426
Keyboard
428
Fixed Disk
430
External Interface

FIG. 9

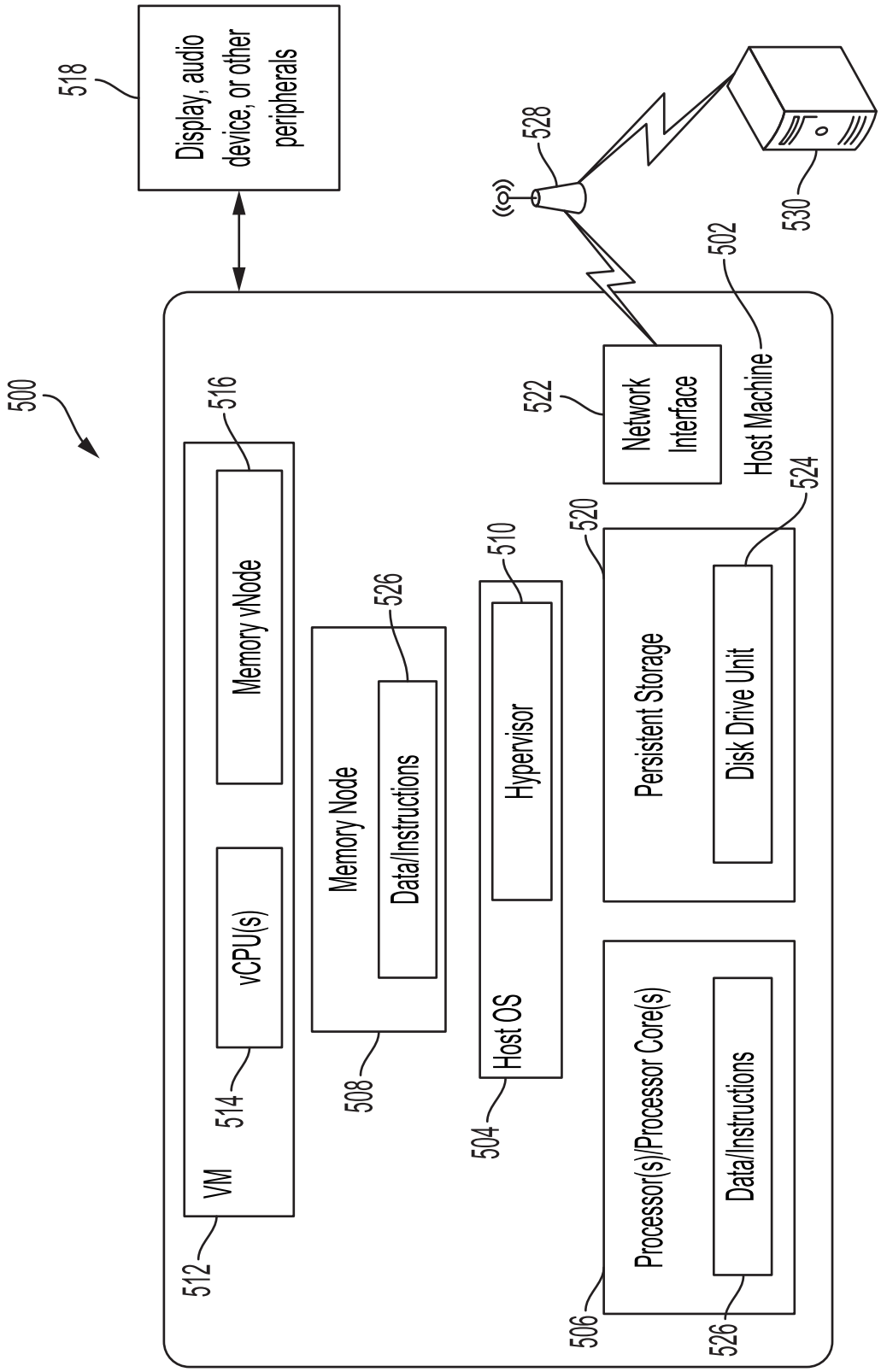

500
518
Display, audio device, or other peripherals
528
530
502
Host Machine
522
Network Interface
516
Memory vNode
VM
514
vCPU(s)
512
526
Memory Node
Data/Instructions
508
510
Hypervisor
Host OS
504
520
Persistent Storage
524
Disk Drive Unit
Processor(s)/Processor Core(s)
506
Data/Instructions
526

FIG. 10