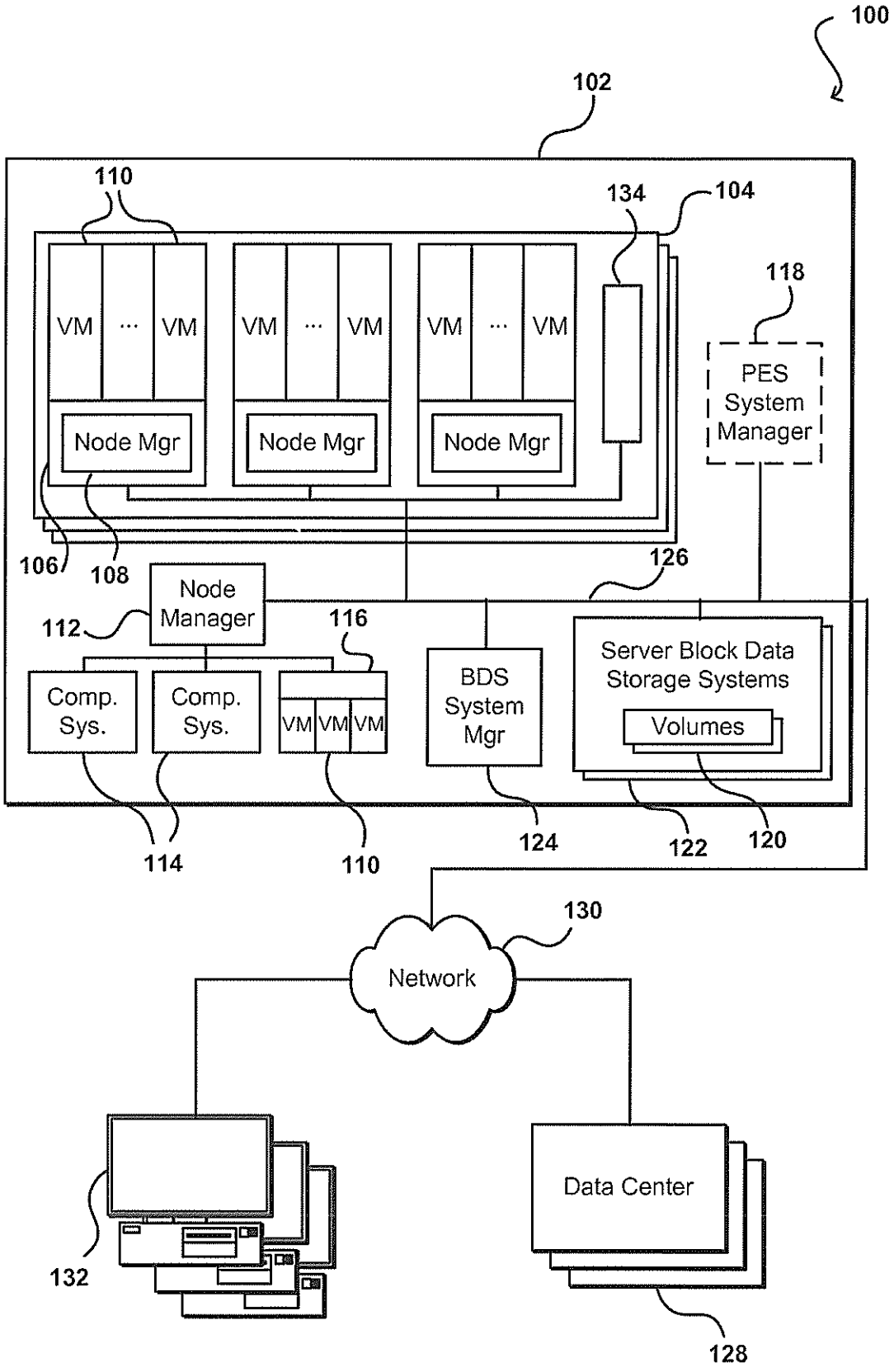

100
102
110
134
104
118
VM
VM
VM
VM
VM
VM
Node Mgr
Node Mgr
Node Mgr
PES System Manager
106
108
126
Node Manager
112
116
Comp. Sys.
Comp. Sys.
VM
VM
VM
BDS System Mgr
Server Block Data Storage Systems
Volumes
114
110
124
122
120
130
Network
132
Data Center
128

FIG. 1

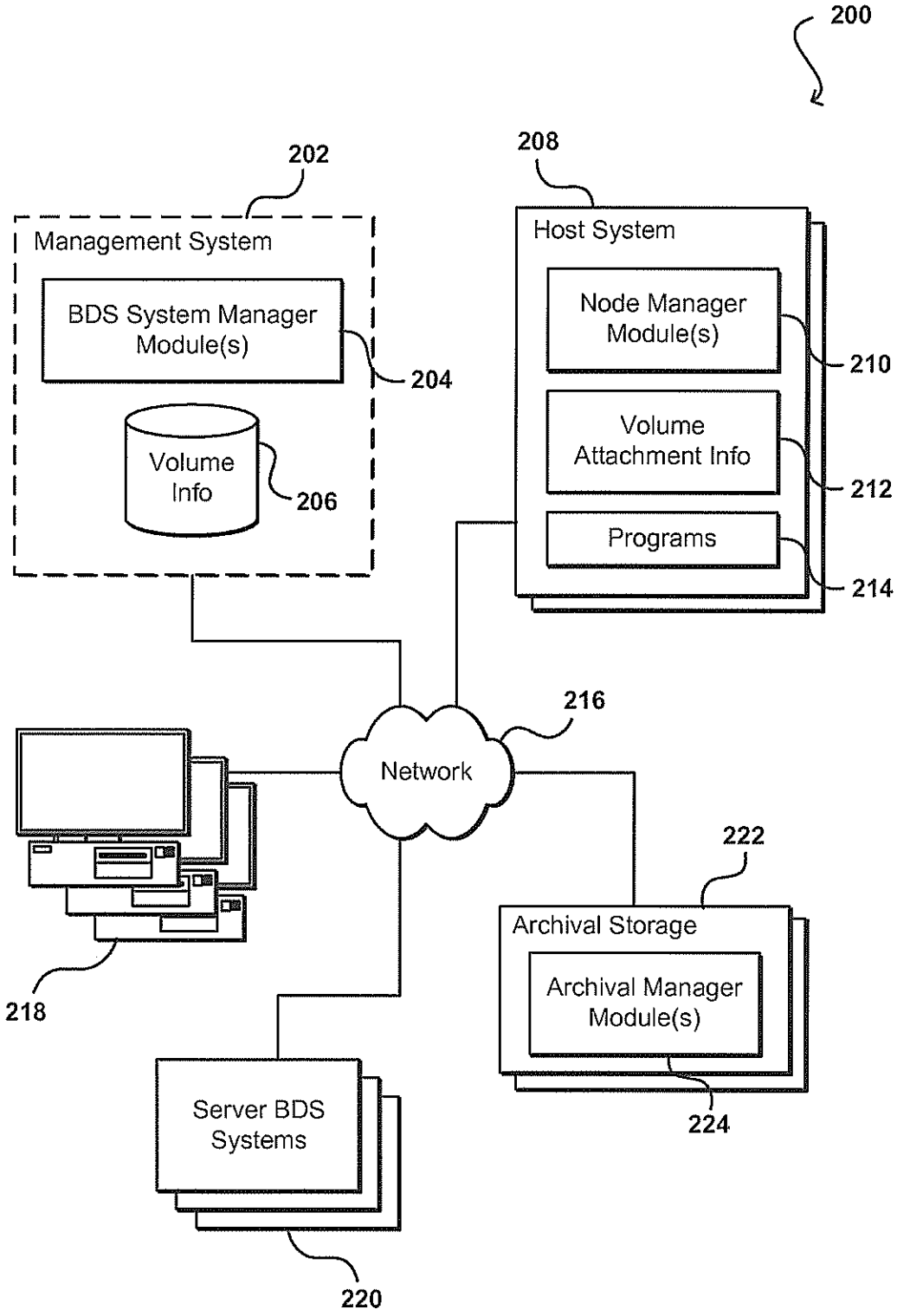

200
202
Management System
BDS System Manager Module(s)
204
Volume Info
206
208
Host System
Node Manager Module(s)
210
Volume Attachment Info
212
Programs
214
216
Network
218
222
Archival Storage
Archival Manager Module(s)
224
Server BDS Systems
220

FIG. 2

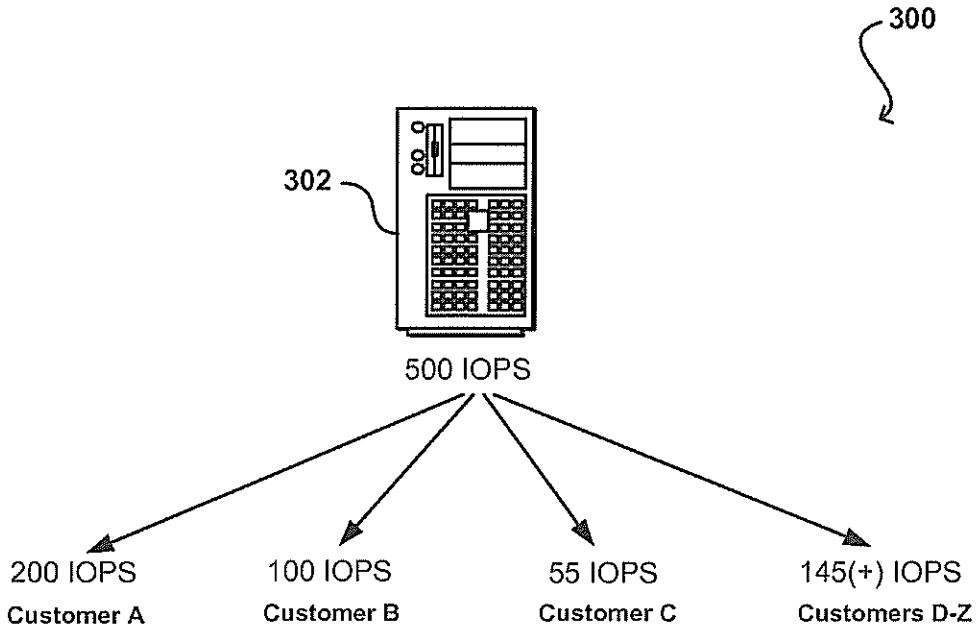

300
302
500 IOPS
200 IOPS
Customer A
100 IOPS
Customer B
55 IOPS
Customer C
145(+) IOPS
Customers D-Z

FIG. 3

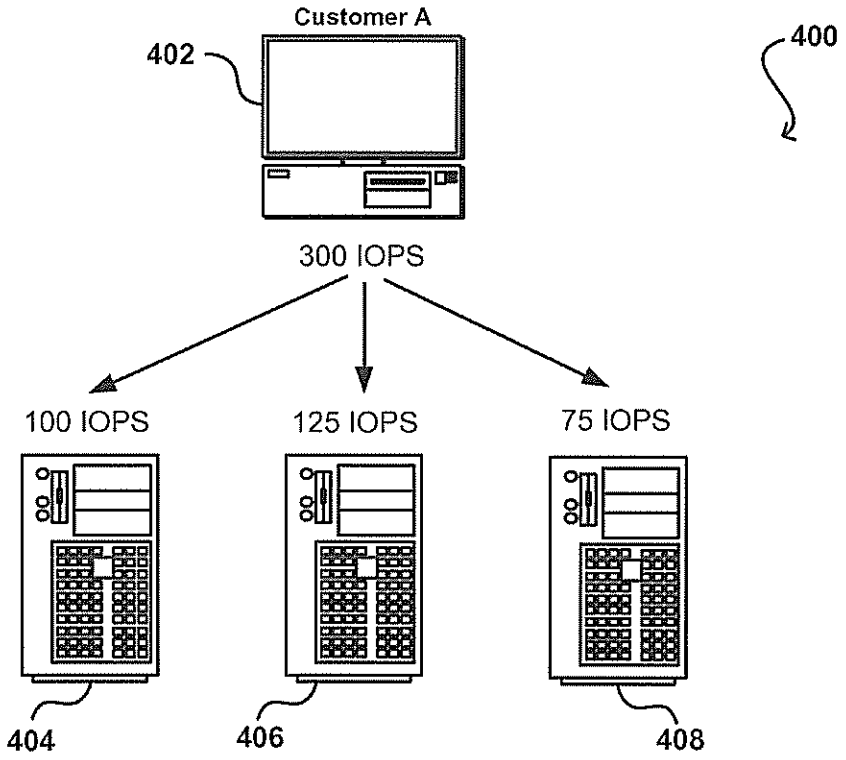

Customer A
402
400
300 IOPS
100 IOPS
125 IOPS
75 IOPS
404
406
408

FIG. 4

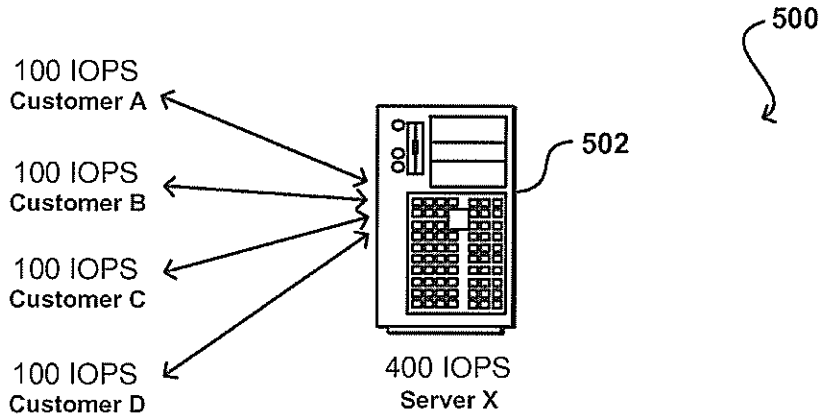

500
100 IOPS
Customer A
100 IOPS
Customer B
100 IOPS
Customer C
100 IOPS
Customer D
502
400 IOPS
Server X

FIG. 5

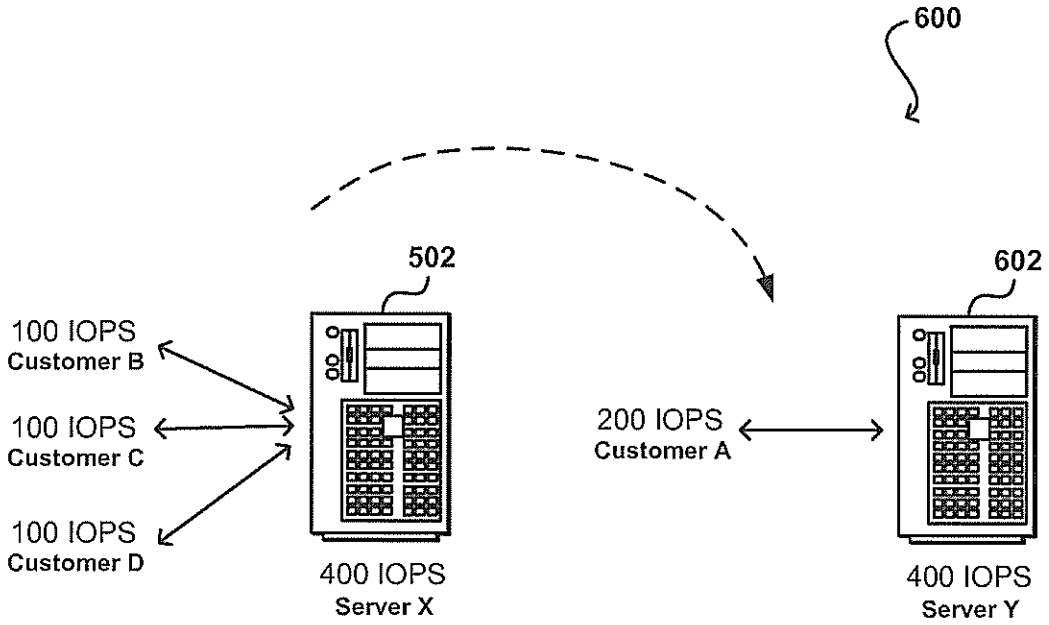

600
502
602
100 IOPS
Customer B
100 IOPS
Customer C
100 IOPS
Customer D
200 IOPS
Customer A
400 IOPS
Server X
400 IOPS
Server Y

FIG. 6

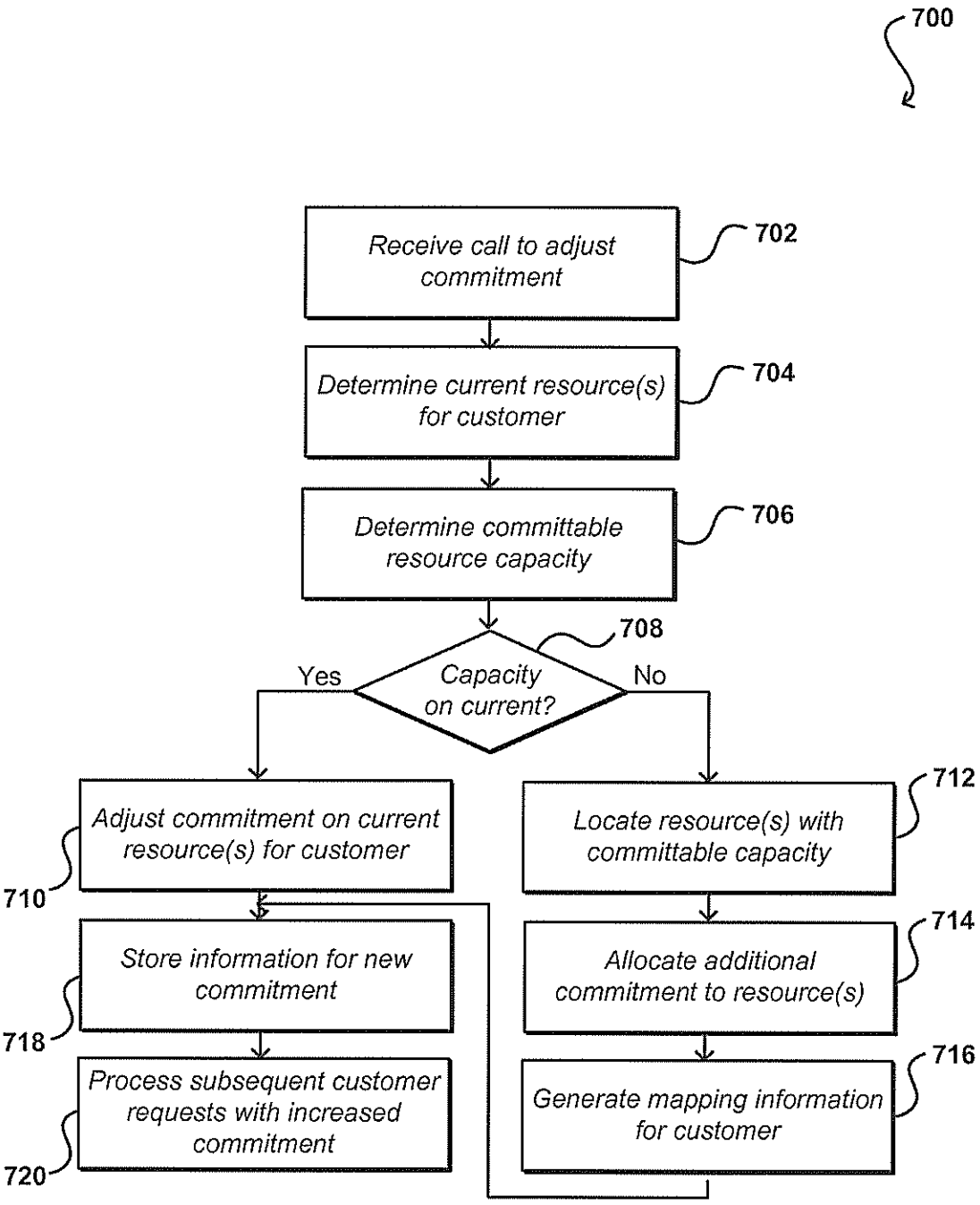

700
Receive call to adjust commitment
702
Determine current resource(s) for customer
704
Determine committable resource capacity
706
708
Capacity on current?
Yes
No
Adjust commitment on current resource(s) for customer
710
Store information for new commitment
718
Process subsequent customer requests with increased commitment
720
Locate resource(s) with committable capacity
712
Allocate additional commitment to resource(s)
714
Generate mapping information for customer
716

FIG. 7

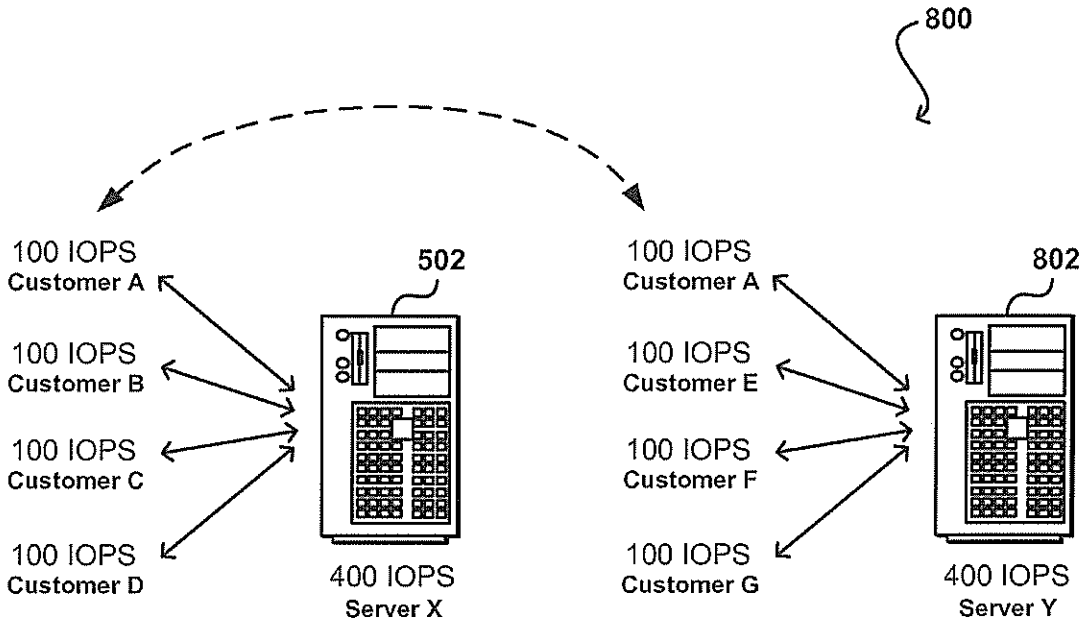

800
100 IOPS
Customer A
100 IOPS
Customer B
100 IOPS
Customer C
100 IOPS
Customer D
502
400 IOPS
Server X
100 IOPS
Customer A
100 IOPS
Customer E
100 IOPS
Customer F
100 IOPS
Customer G
802
400 IOPS
Server Y

FIG. 8

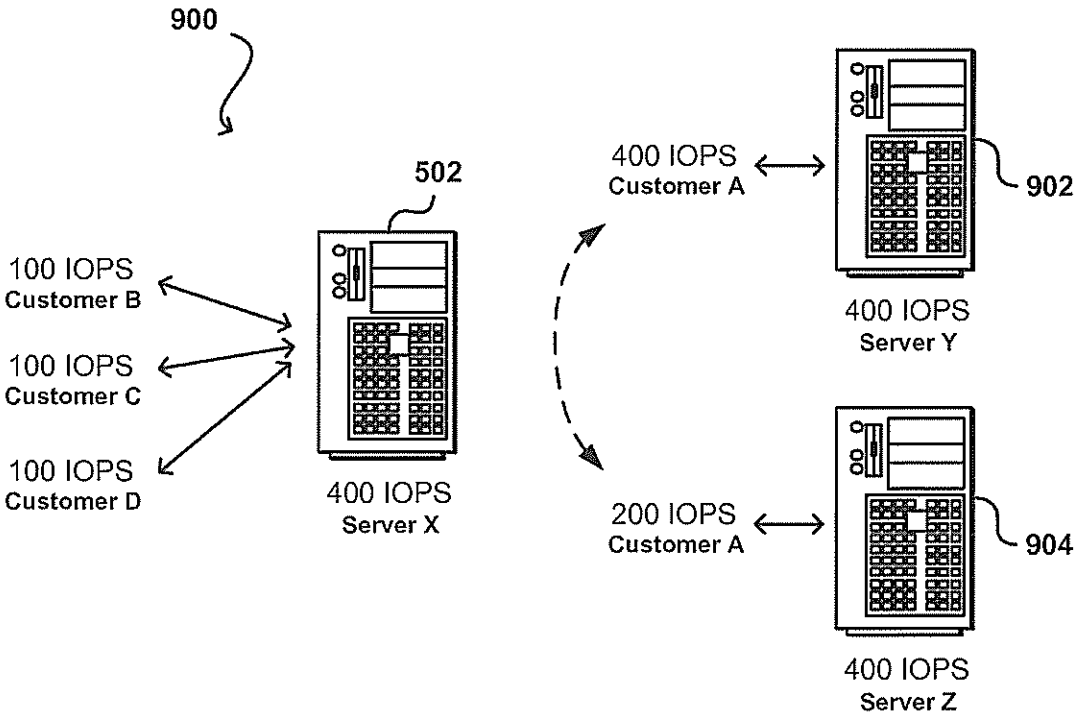

900
100 IOPS
Customer B
100 IOPS
Customer C
100 IOPS
Customer D
502
400 IOPS
Server X
400 IOPS
Customer A
902
400 IOPS
Server Y
200 IOPS
Customer A
904
400 IOPS
Server Z

FIG. 9

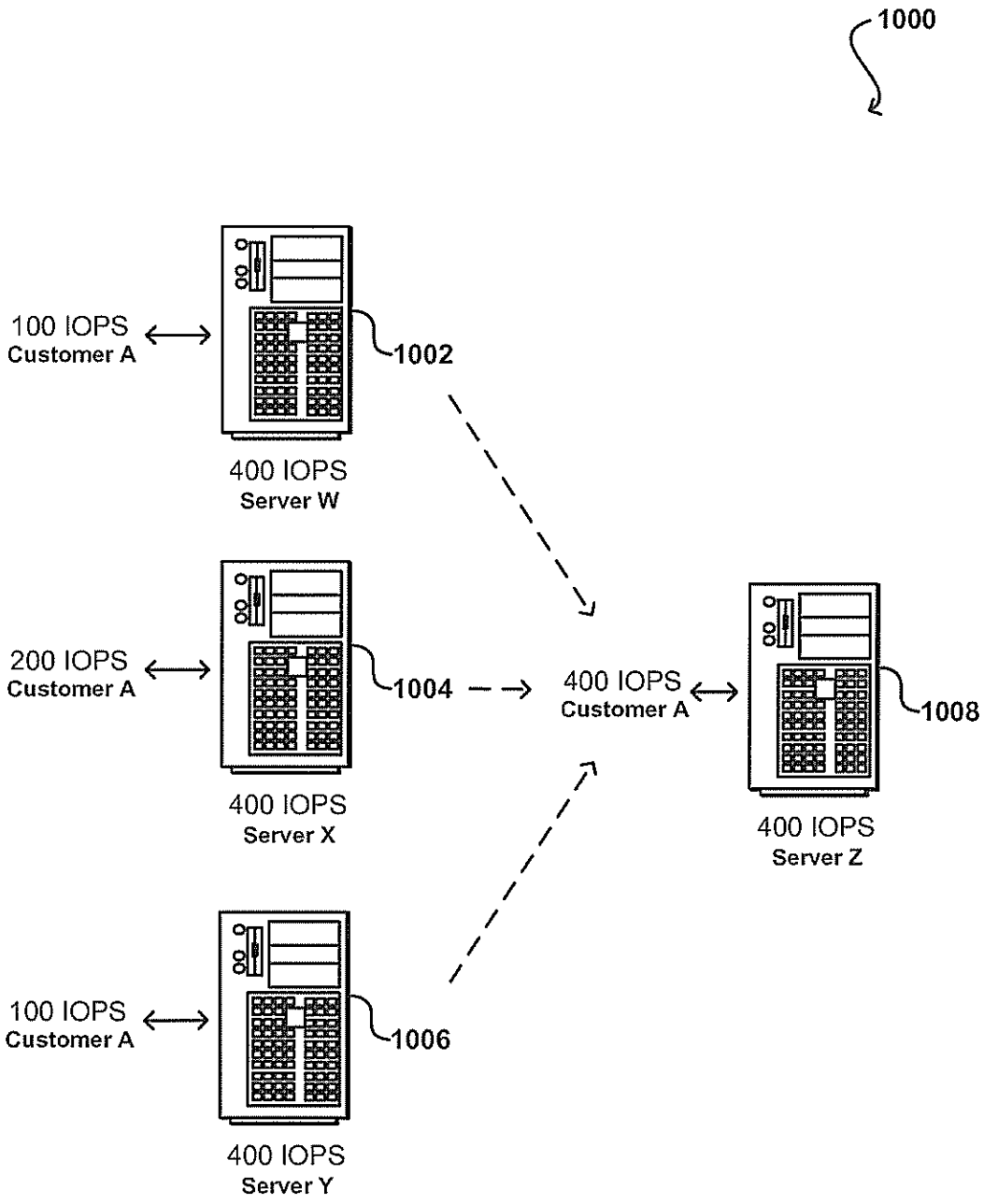

1000
100 IOPS
Customer A
1002
400 IOPS
Server W
200 IOPS
Customer A
1004
400 IOPS
Server X
100 IOPS
Customer A
1006
400 IOPS
Server Y
400 IOPS
Customer A
1008
400 IOPS
Server Z

FIG. 10

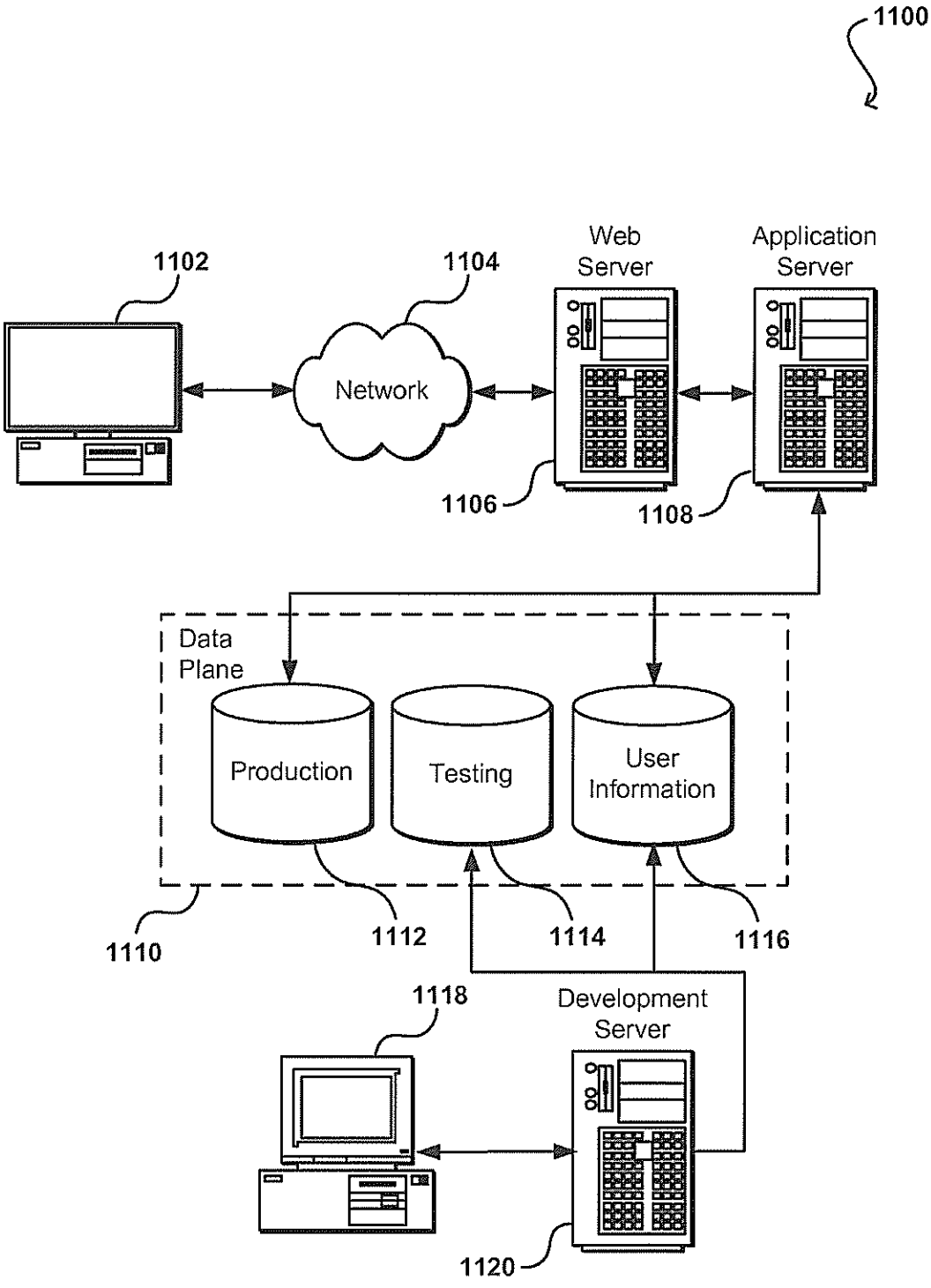

1100
1102
1104
Web Server
Application Server
Network
1106
1108
Data Plane
Production
Testing
User Information
1110
1112
1114
1116
1118
Development Server
1120

FIG. 11