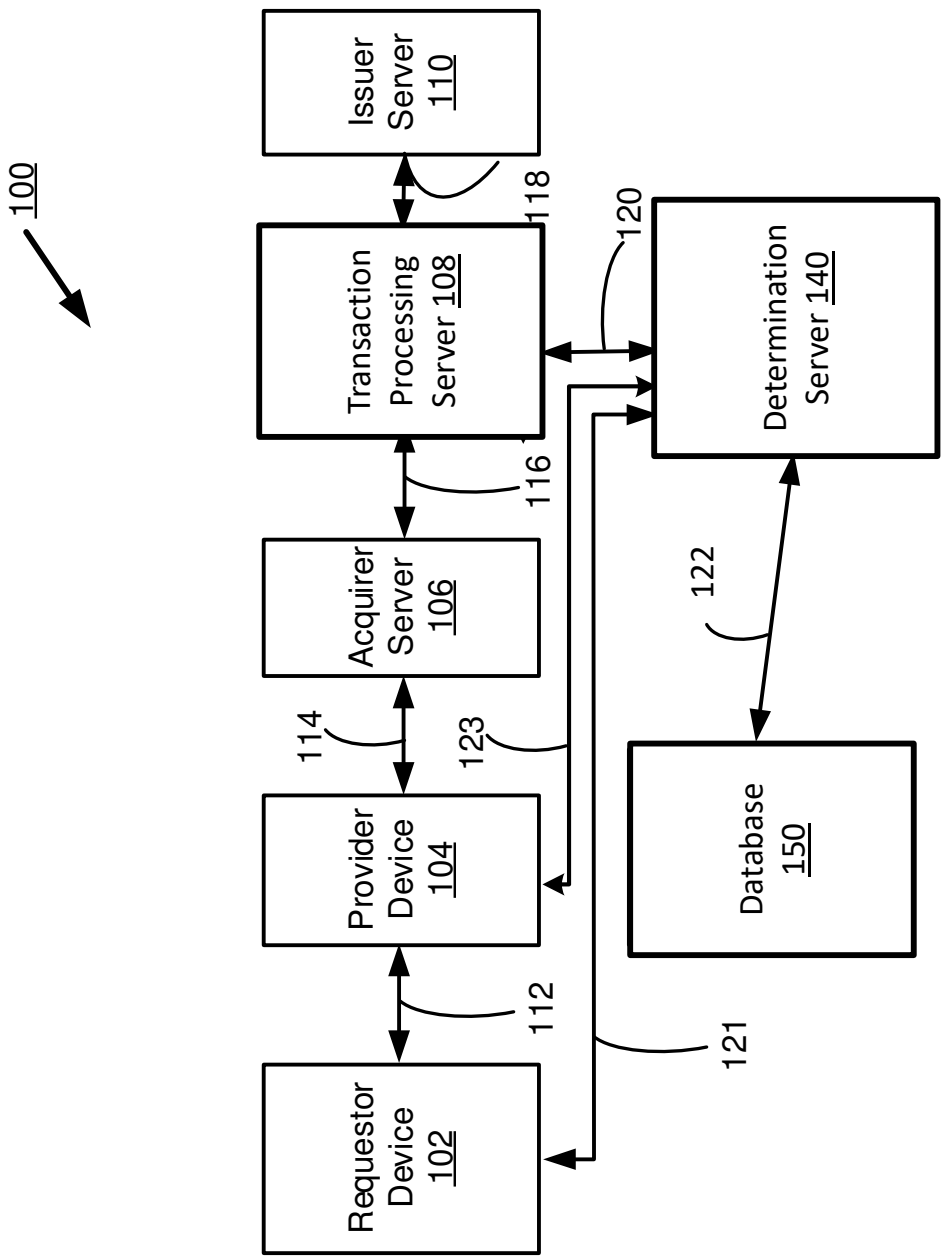

100
Issuer Server 110
Transaction Processing Server 108
Determination Server 140
Acquirer Server 106
Provider Device 104
Requestor Device 102
Database 150
118
120
116
114
123
122
112
121

Fig. 1

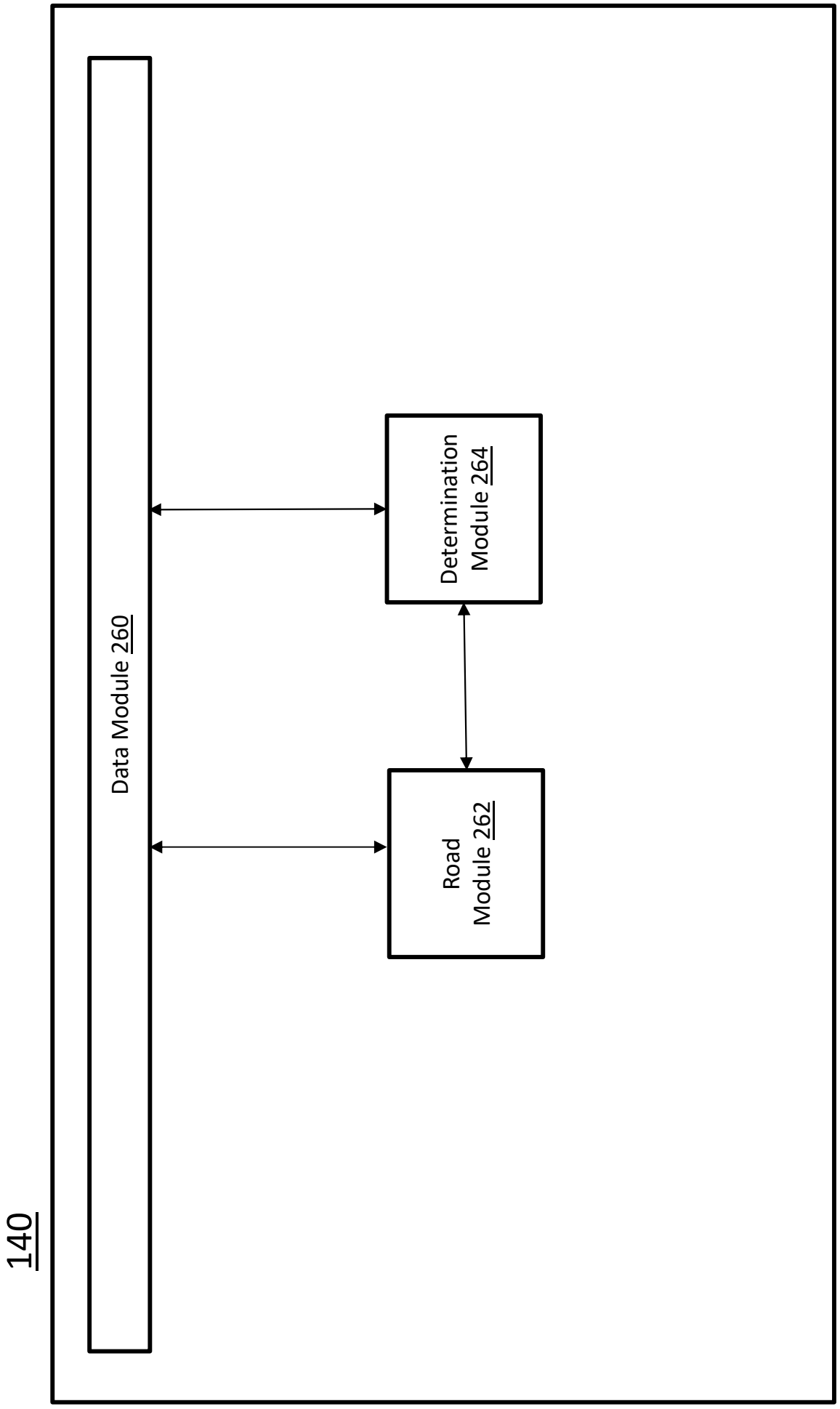

140
Data Module 260
Determination Module 264
Road Module 262

FIG. 2


300
304
302
308
306
way #32586993
way #172598068
Rạch Giồng Ông Tố
Đường Nguyễn Duy Trinh
Đường số 31
Nguyễn Tuyển
Nguyễn Từ Nghiêm
Đường số 42
Lê Văn Thịnh
Đường số 13
Đường số 11
Đường số 10
Đường Bình Trưng
Bình Trưng Tây
Đường số 8
Đường số 5
Đường số 3

Figure 3A

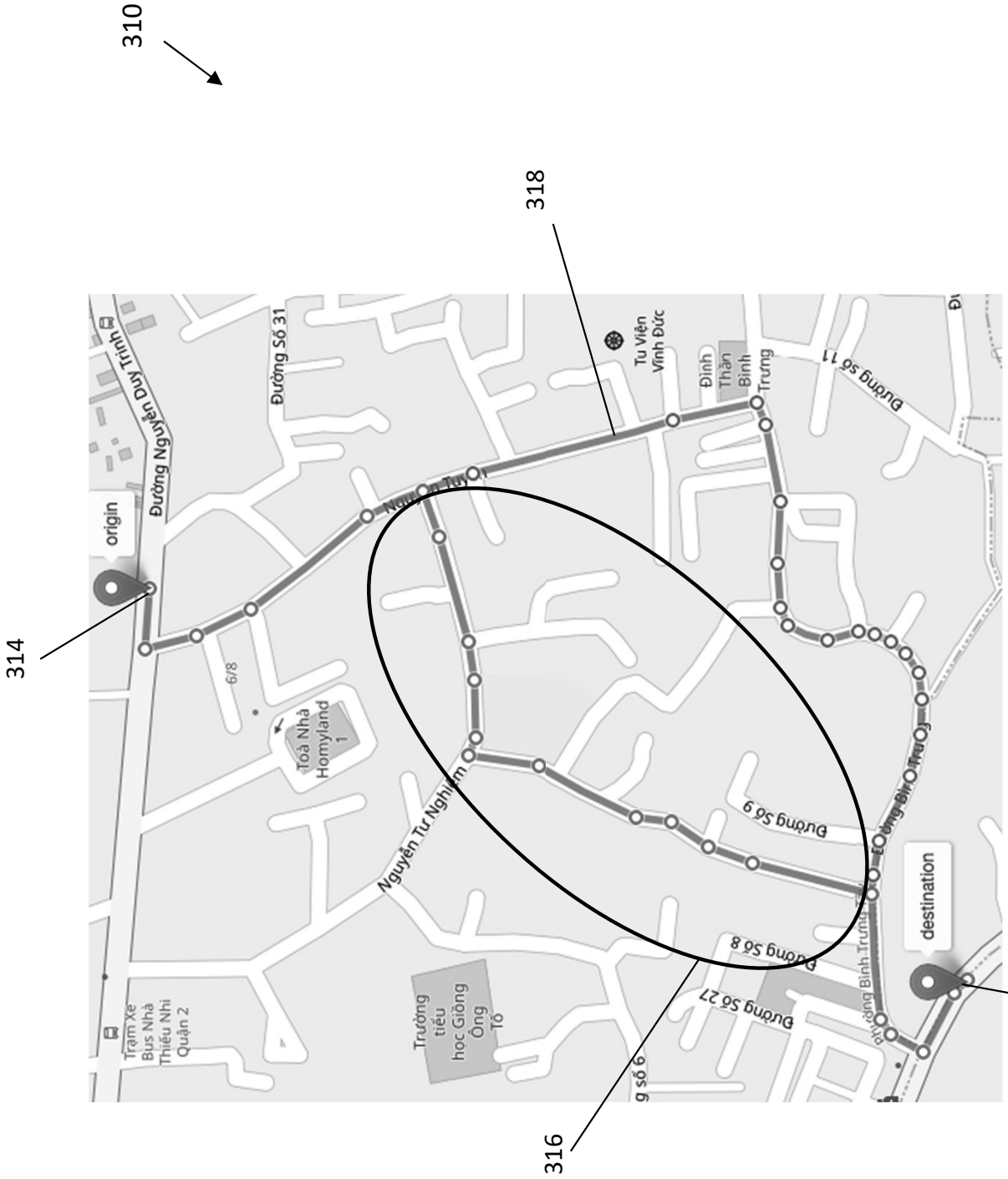

310
318
314
316
312
origin
destination
Đường Số 31
Đường Nguyễn Duy Trinh
Tu Viện Vĩnh Đức
Đình Thần Bình Trưng
Đường số 11
Nguyễn Tư Nghiêm
Đường số 9
Đường số 8
Đường số 27
Tòa Nhà Homyland 1
6/8
Trường tiểu học Giồng Ông Tố
Trạm Xe Bus Nhà Thiếu Nhi Quận 2

Figure 3B

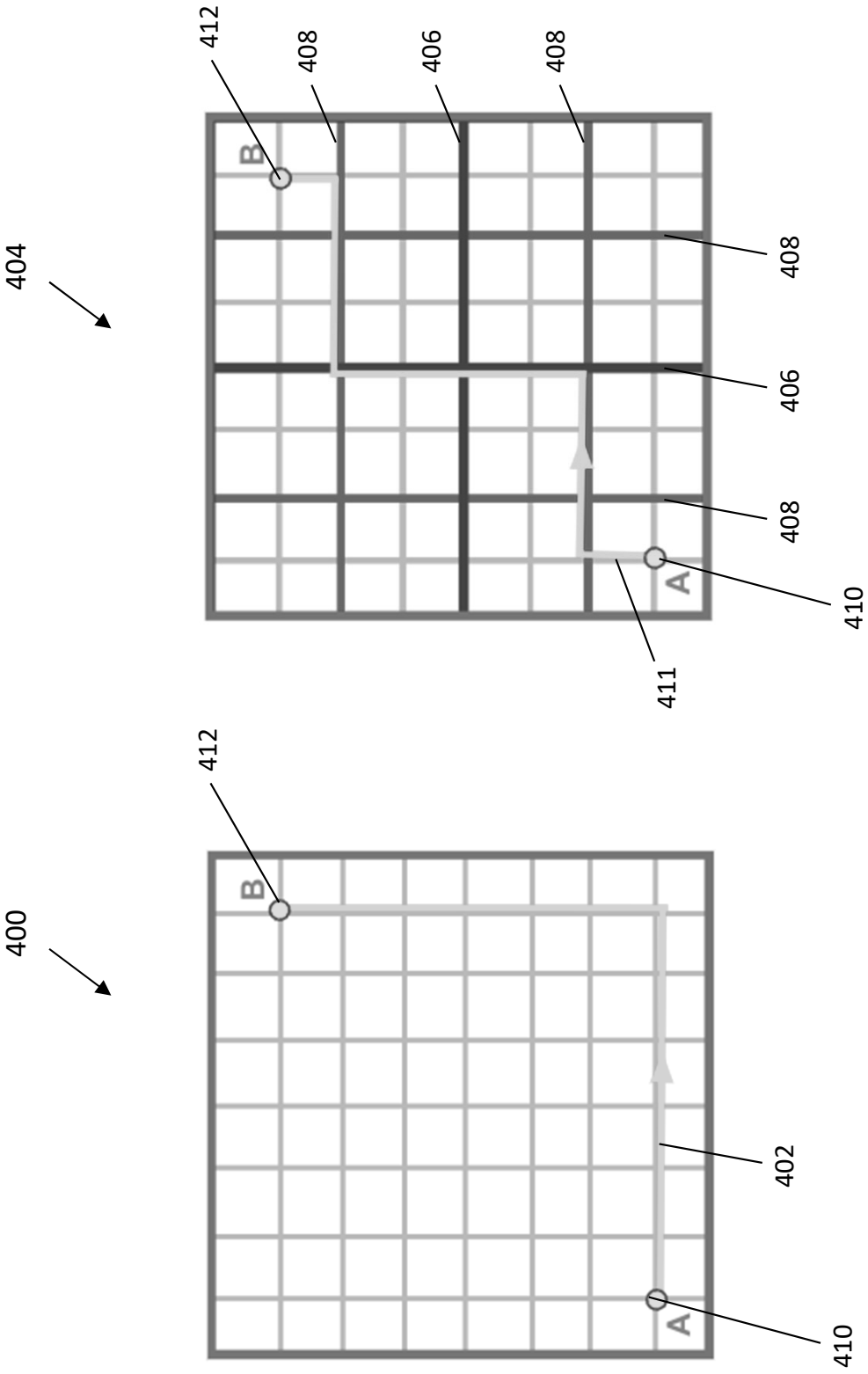


Figure 4A

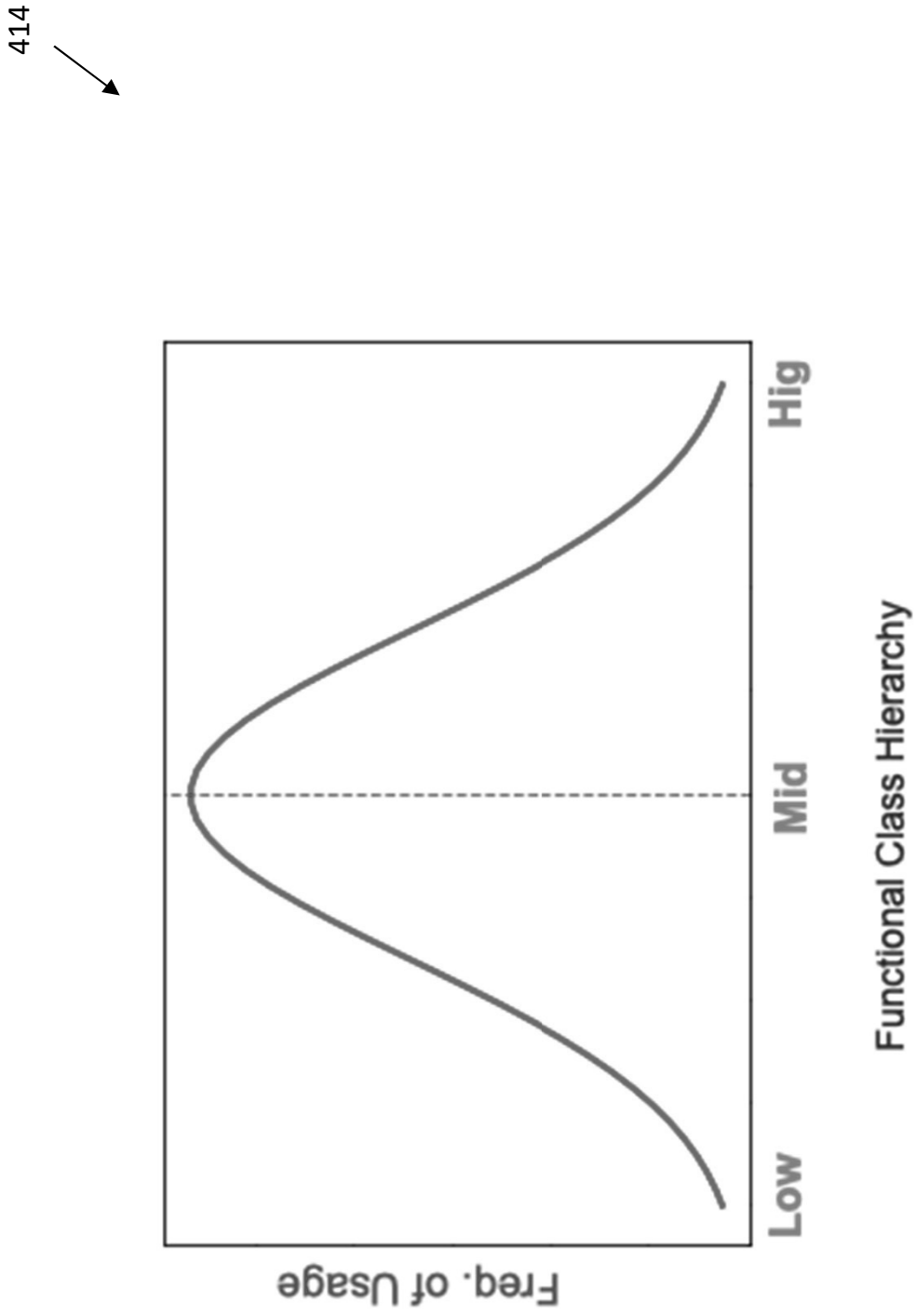


Figure 4B

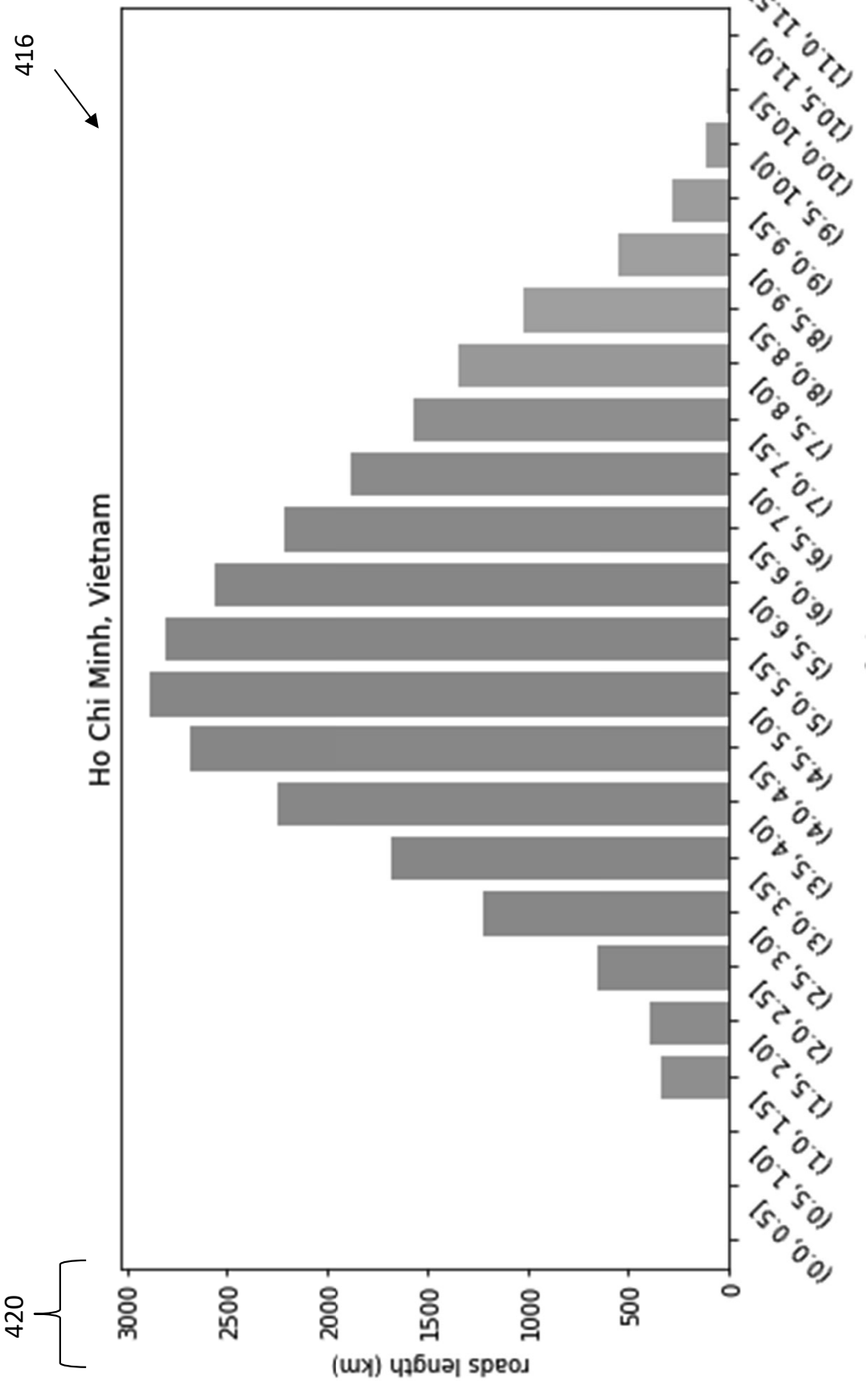

416
Ho Chi Minh, Vietnam
roads length (km)
3000
2500
2000
1500
1000
500
0
(0.0, 0.5]
(0.5, 1.0]
(1.0, 1.5]
(1.5, 2.0]
(2.0, 2.5]
(2.5, 3.0]
(3.0, 3.5]
(3.5, 4.0]
(4.0, 4.5]
(4.5, 5.0]
(5.0, 5.5]
(5.5, 6.0]
(6.0, 6.5]
(6.5, 7.0]
(7.0, 7.5]
(7.5, 8.0]
(8.0, 8.5]
(8.5, 9.0]
(9.0, 9.5]
(9.5, 10.0]
(10.0, 10.5]
(10.5, 11.0]
(11.0, 11.5]
418
420

Figure 4C

422

```
target_percentages = [0.502, 0.251, 0.125, 0.063, 0.031, 0.016, 0.008, 0.004]
stops = []
low, up = 0, 0
for tp in target_percentages:
    for up in np.arange(0, max_factor, step = 0.001):
        if road_length_factor_between(low, up) / total_road_length < tp:
            continue
        stops.append(up)
        low = up
print('stops:', stops)
```

Figure 4D



Figure 4E

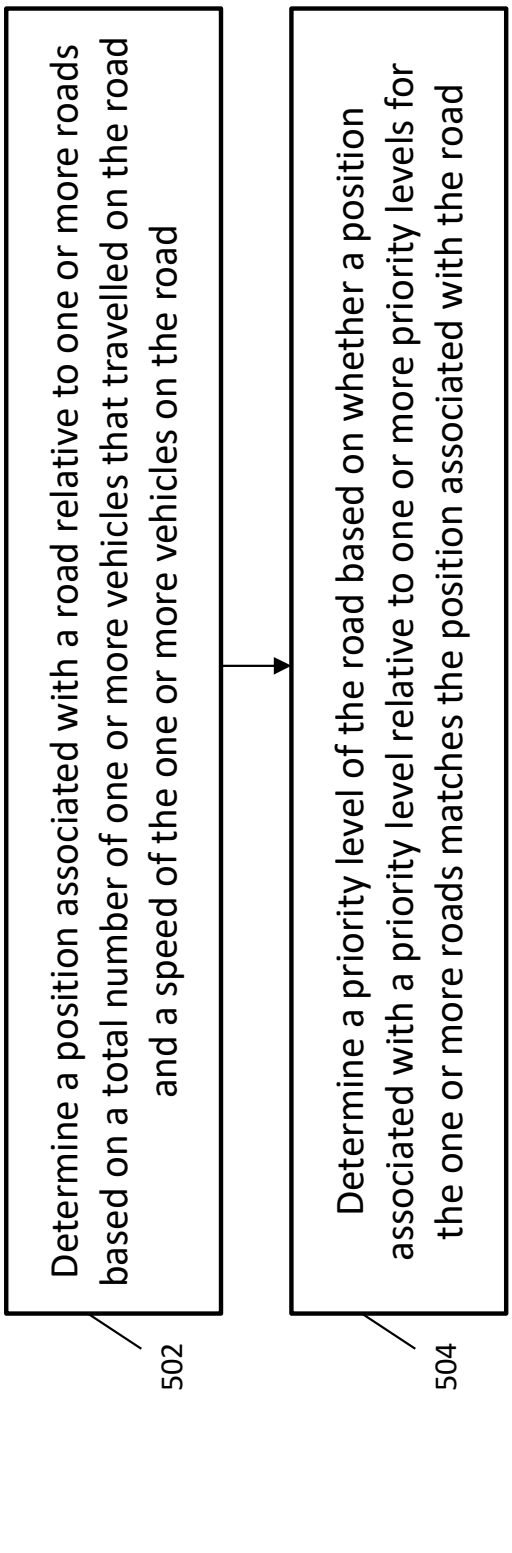

Determine a position associated with a road relative to one or more roads based on a total number of one or more vehicles that travelled on the road and a speed of the one or more vehicles on the road
Determine a priority level of the road based on whether a position associated with a priority level relative to one or more priority levels for the one or more roads matches the position associated with the road
502
504
500

Figure 5

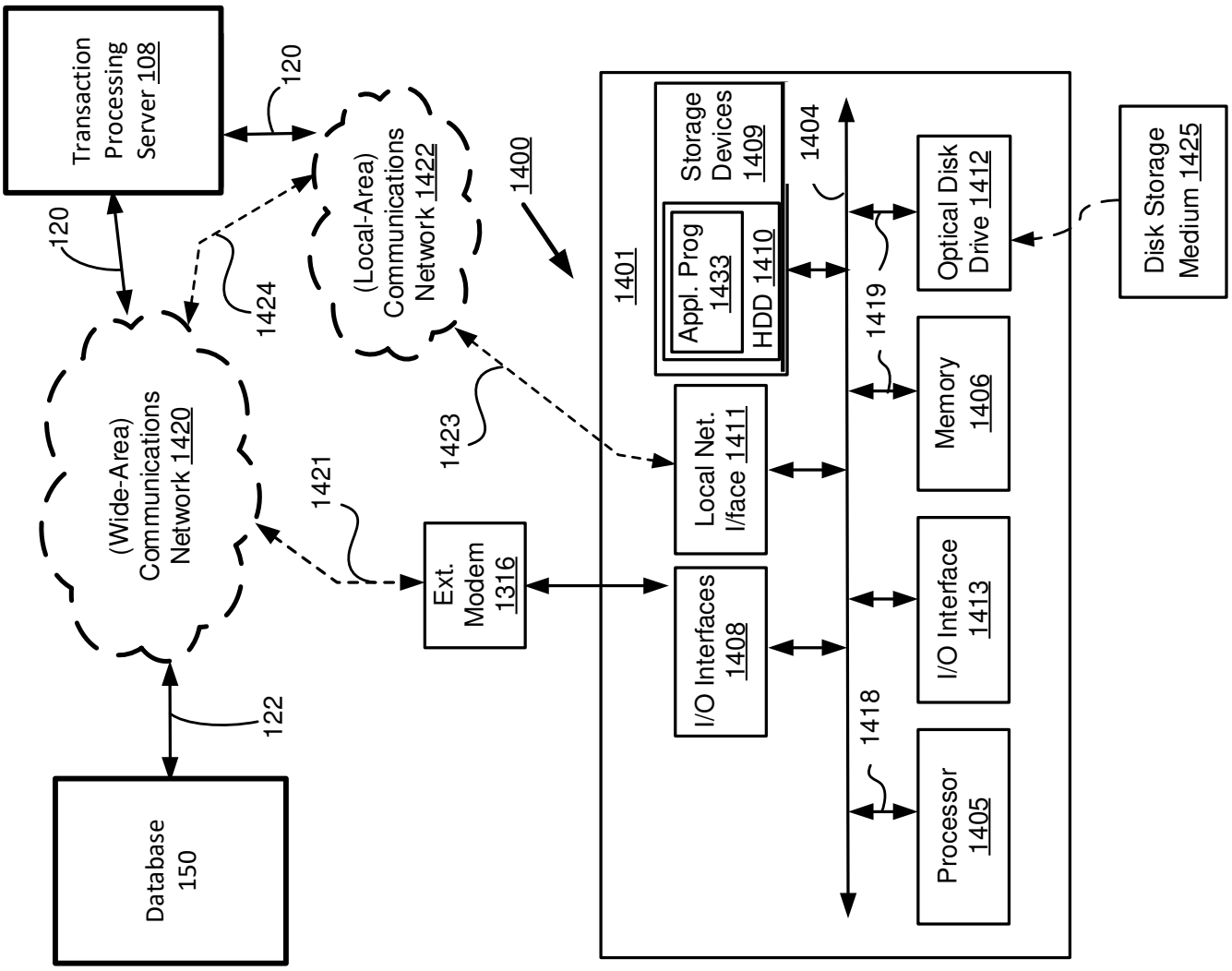

Transaction Processing Server 108
120
120
(Local-Area) Communications Network 1422
1400
1424
(Wide-Area) Communications Network 1420
1401
Storage Devices 1409
Appl. Prog 1433
HDD 1410
1404
1421
1423
Local Net. I/face 1411
Optical Disk Drive 1412
Disk Storage Medium 1425
1419
Memory 1406
Ext. Modem 1316
I/O Interfaces 1408
I/O Interface 1413
1418
122
Processor 1405
Database 150

Figure 6

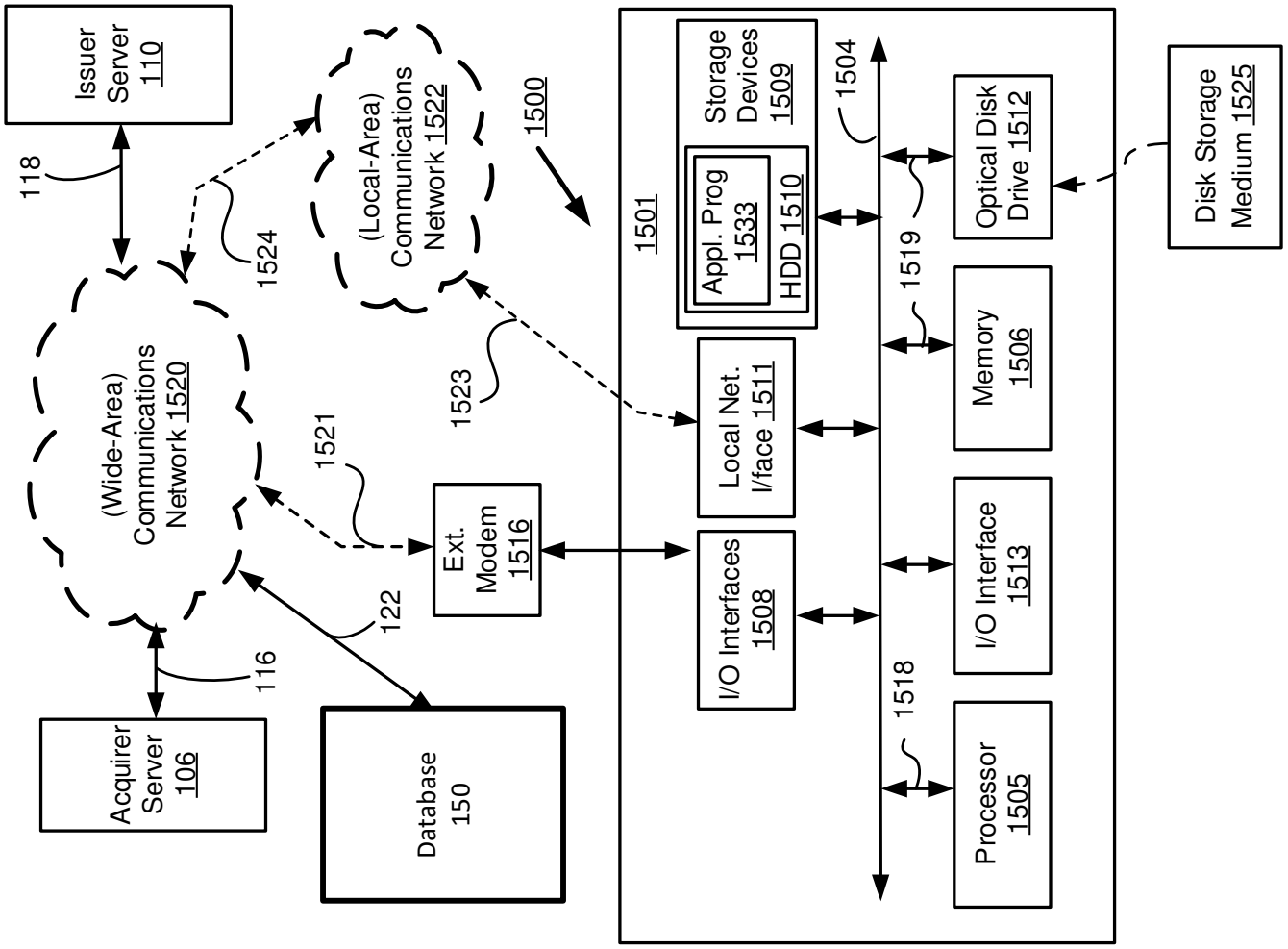

Issuer Server 110
118
(Wide-Area) Communications Network 1520
1524
(Local-Area) Communications Network 1522
1500
1501
Storage Devices 1509
Appl. Prog 1533
HDD 1510
1504
1523
1521
Local Net. I/face 1511
Memory 1506
1519
Optical Disk Drive 1512
Disk Storage Medium 1525
Ext. Modem 1516
I/O Interfaces 1508
I/O Interface 1513
122
116
Acquirer Server 106
Database 150
1518
Processor 1505

Figure 7

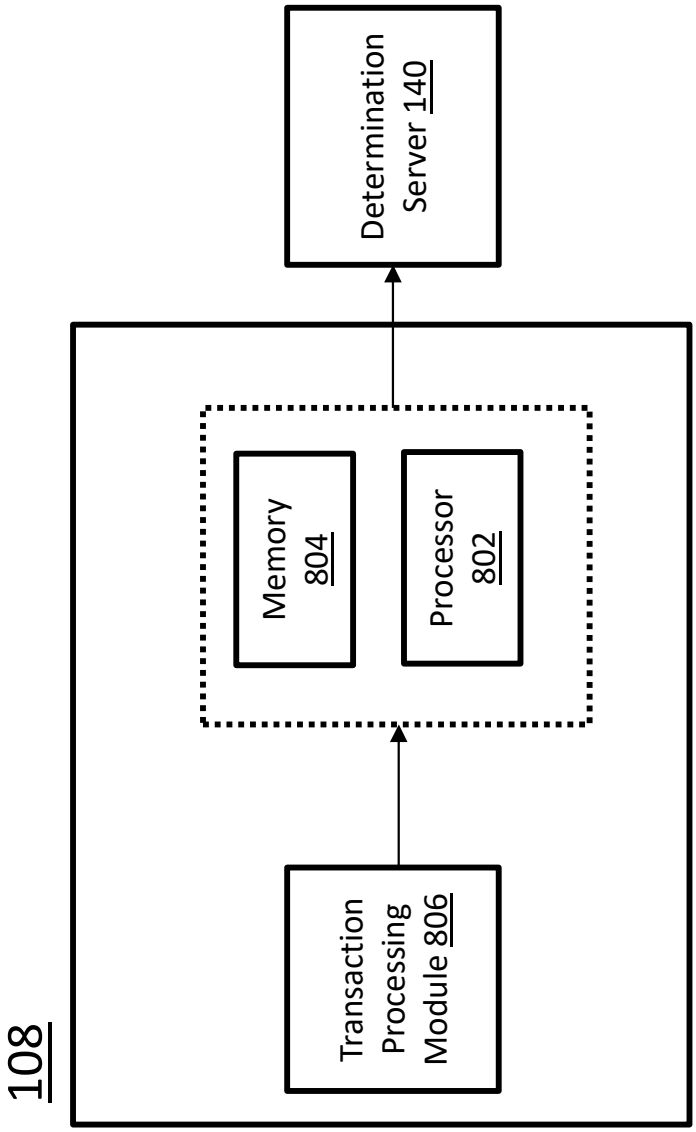

Determination Server 140
Memory 804
Processor 802
Transaction Processing Module 806
108

Figure. 8

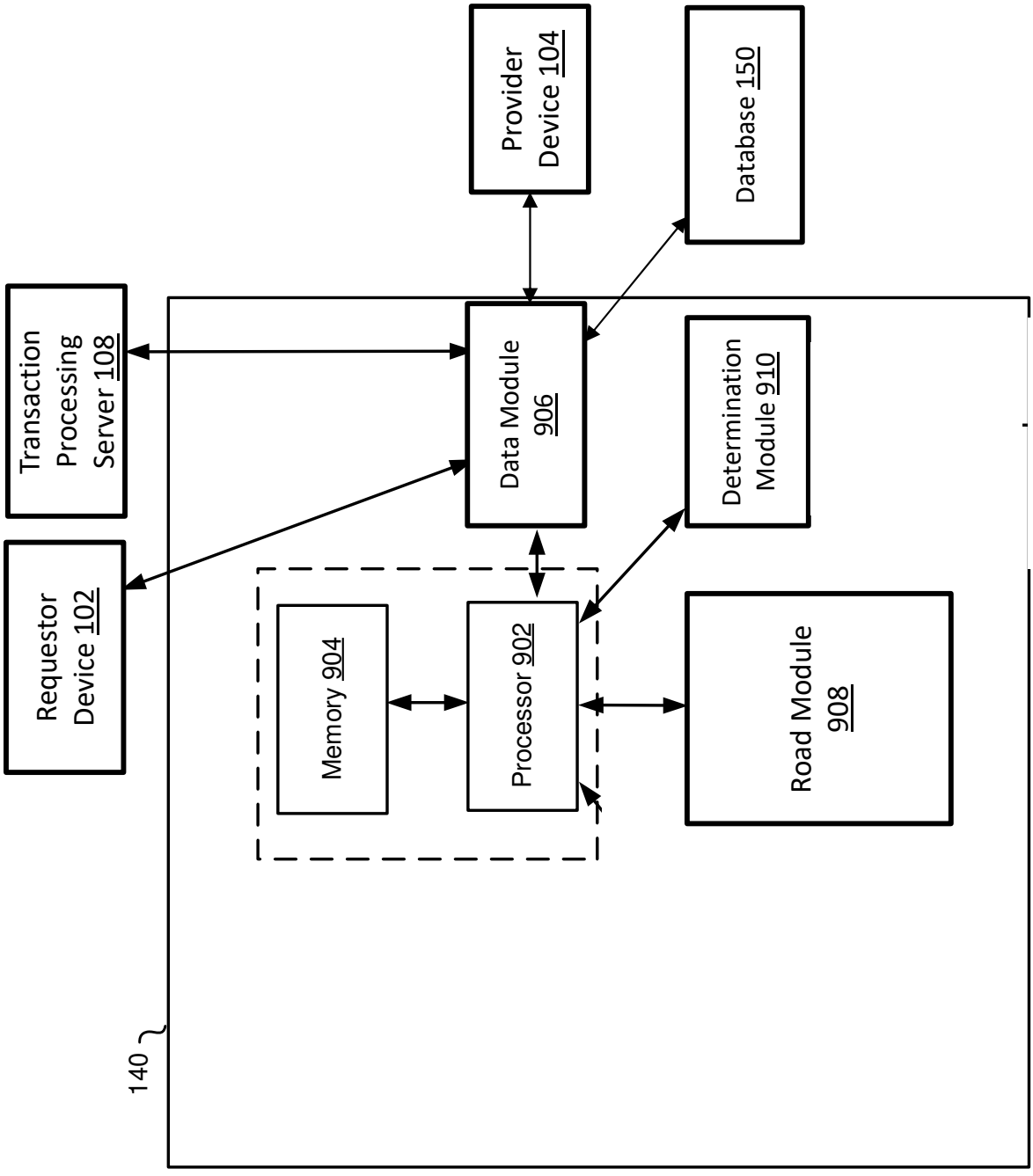

Provider Device 104
Database 150
Transaction Processing Server 108
Data Module 906
Determination Module 910
Requestor Device 102
Memory 904
Processor 902
Road Module 908
140

Figure 9

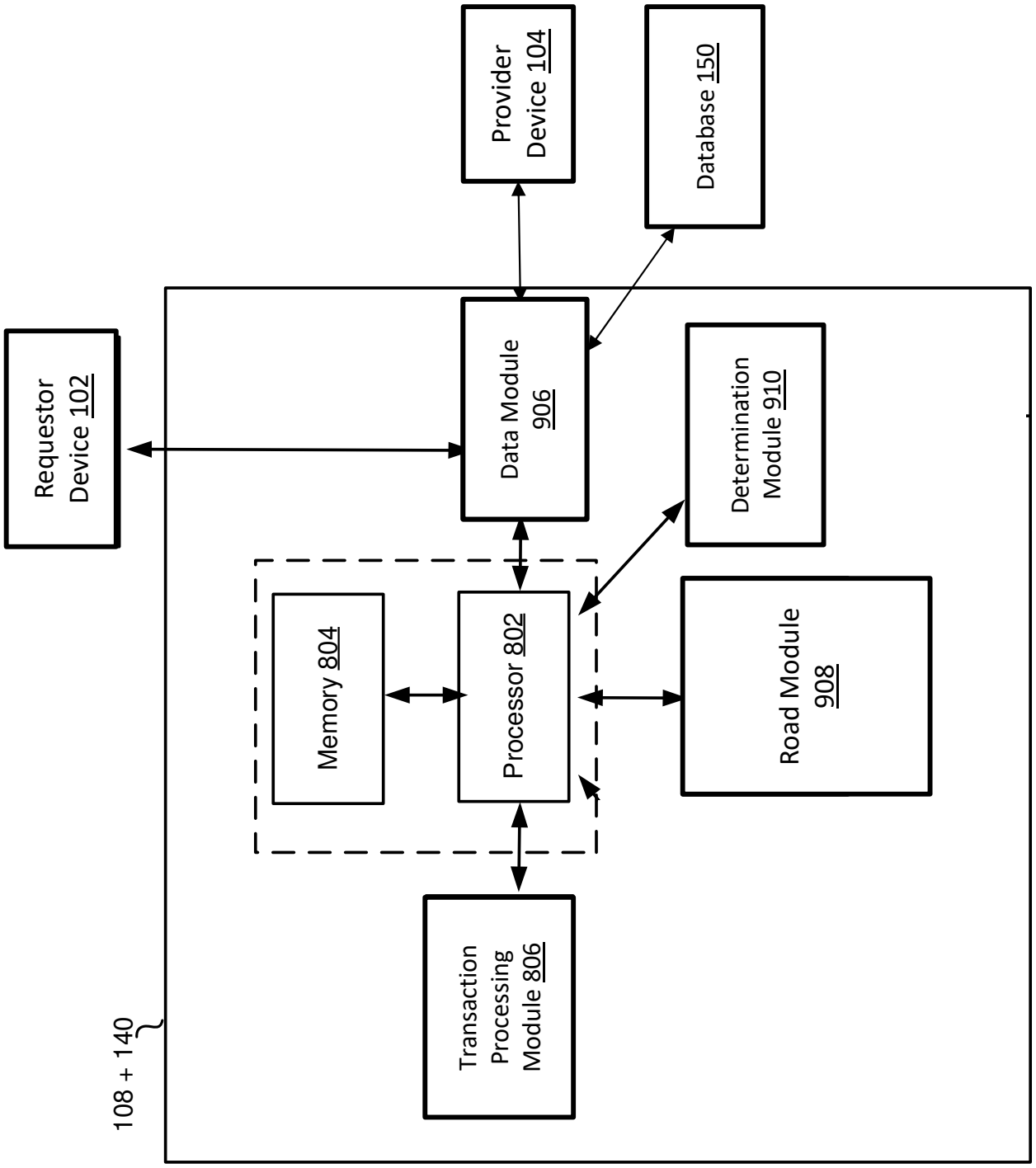

Provider Device 104
Database 150
Requestor Device 102
Data Module 906
Determination Module 910
Memory 804
Processor 802
Road Module 908
Transaction Processing Module 806
108 + 140

Figure 10